

**APPENDIX 3.1.8-1**  
*Overview of Sewer Service*



# **DEXTER WILSON ENGINEERING, INC.**

WATER • WASTEWATER • RECYCLED WATER  
CONSULTING ENGINEERS

## **OVERVIEW OF SEWER SERVICE FOR OTAY RANCH VILLAGE 14 AND PLANNING AREAS 16/19**

**February 2018**

**OVERVIEW OF SEWER SERVICE  
FOR  
OTAY RANCH VILLAGE 14  
AND PLANNING AREAS 16/19**

**February 2018**



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**Job No. 820-007**

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## **CHAPTER 1**

### **INTRODUCTION**

This report provides an overview of sewer service for Otay Ranch Village 14 and Planning Areas 16/19 (“Proposed Project”) and recommends wastewater facilities specific to the needs of the Proposed Project. Sewer service is not currently provided to the Proposed Project site; however, the City of Chula Vista provides sewer service in the vicinity of the Proposed Project. This report will calculate sewage flows from the Proposed Project, outline fees to be paid for transportation and capacity in regional sewer facilities, and recommend onsite and offsite facilities necessary to accommodate project flows. Final design criteria and specifications for all sewage facilities shall comply with all County requirements and policies and will be subject to review and approval by the Director of Public Works and regulatory agencies. Figure 1-1 presents a location map of the Proposed Project.

### **OVERVIEW AND BACKGROUND**

The Proposed Project (defined below) is part of the overall Otay Ranch, an approximately 23,000-acre master-planned community in southern San Diego County designed as a series of villages and planning areas. The Proposed Project addressed by this technical report is located within a portion of Otay Ranch Village 14 and Planning Areas 16/19 in the Proctor Valley area of Otay Ranch as shown on Figure 1-1.

The underlying purpose of the Proposed Project is to implement the adopted Otay Ranch General Development Plan/Subregional Plan, Volume II (County of San Diego 1993), (“Otay Ranch GDP/SRP”) and complete the planned development within Jackson Pendo Development Company’s (“Applicant”) ownership of Village 14 and Planning Areas 16/19. The Otay Ranch GDP/SRP is a component part of the County General Plan (County of San Diego 2011) and allows for a total of 2,123 homes in Otay Ranch Village 14 and Planning Areas 16/19. The Proposed Project’s 1,119 homes represent a portion of the total 2,123 homes originally authorized in the Otay Ranch GDP/SRP.

The Proposed Project is designed to be consistent with the Otay Ranch GDP/SRP’s Village Character Policy “to serve as a transitional area between urban densities to the west and Jamul to the east”. The Proposed Project is therefore designed to provide a transitional

village between the densities and character of eastern Chula Vista and the more rural community of Jamul. The Proposed Project proposes 1,119<sup>1</sup> homes of which 994 are in Village 14 and 125 homes in Planning Areas 16/19 as shown in Table 1-1 Site Utilization Plan Summary.

The following describes the major components and characteristics of the Proposed Project.

## **DEFINITIONS**

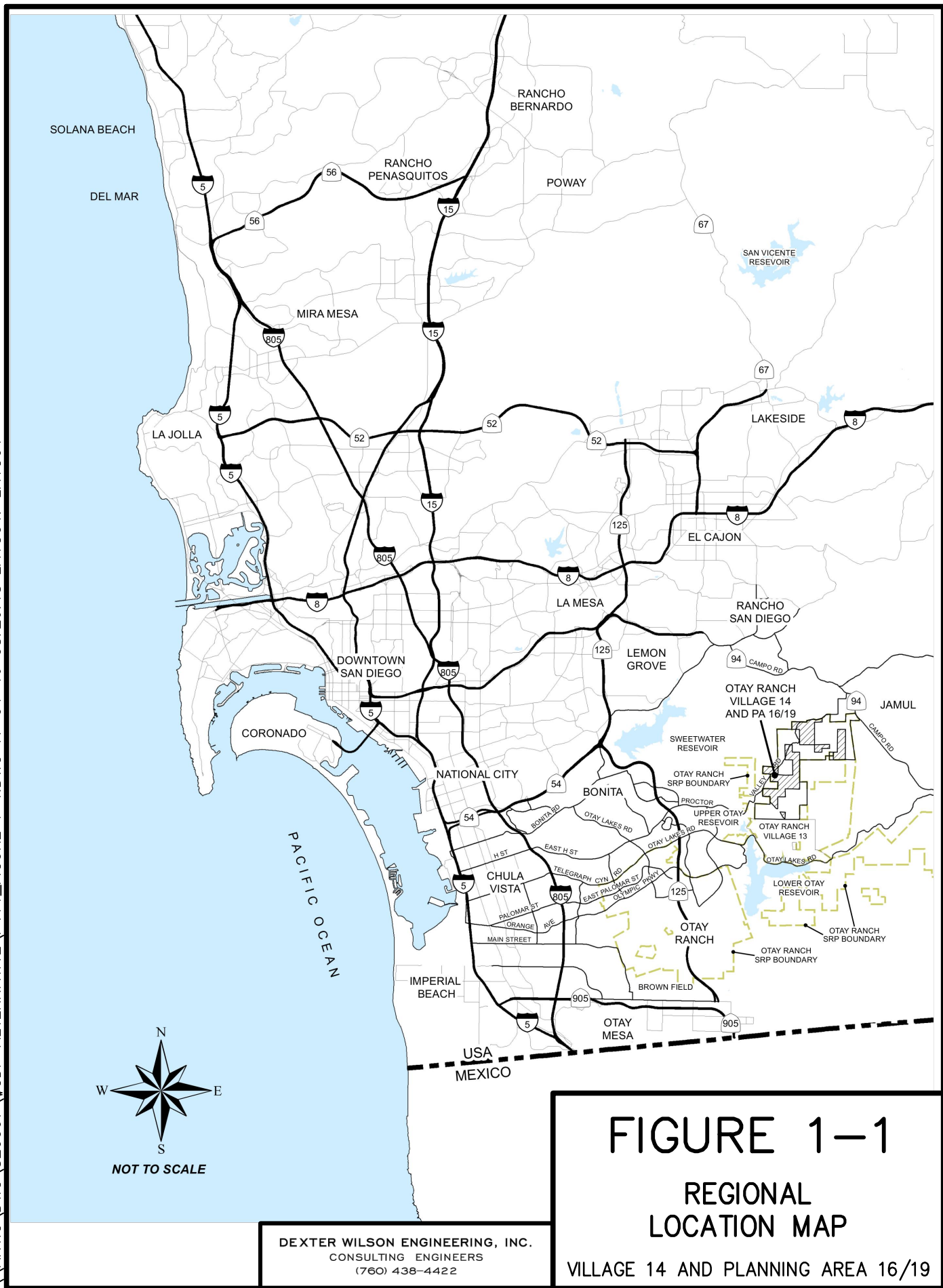
“County” Defined: The “County” is the County of San Diego Jurisdiction.

“Project Area” Defined: The “Project Area” is the Applicant’s ownership within Otay Ranch Village 14 and Planning Areas 16/19 in addition to certain off-site areas for infrastructure as depicted in Figure 1-2. The Project Area covers approximately 1,283.6 acres owned by the Applicant and approximately 85.4 acres of Off-site improvements described below, for a total of 1,369 acres.

“Proposed Project” Defined: The “Proposed Project” is the Applicant’s ownership as depicted in Figure 1-3. The specific plan for the Proposed Project is titled “Otay Ranch Village 14 and Planning Areas 16/19 Specific Plan.” The Proposed Project includes a Specific Plan, General Plan Amendments, EIR, Rezone, Tentative Map, and an Otay Ranch RMP Amendment. The Proposed Project is further defined in Section 1.0 of the EIR which is incorporated herein by reference. Except for the off-sites described below, the Proposed Project specifically excludes the State of California’s ownership in Village 14 and Planning Areas 16, which remains approved for development per the County’s General Plan and the Otay Ranch GDP/SRP. The underlying County General Plan and Otay Ranch GDP/SRP land uses on the State’s property will remain unchanged. In addition, the “Inverted L” is excluded from this analysis as it is not owned by the Applicant and is in the City of Chula Vista, (the property is owned by Otay Water District and the United States Fish and Wildlife Service).

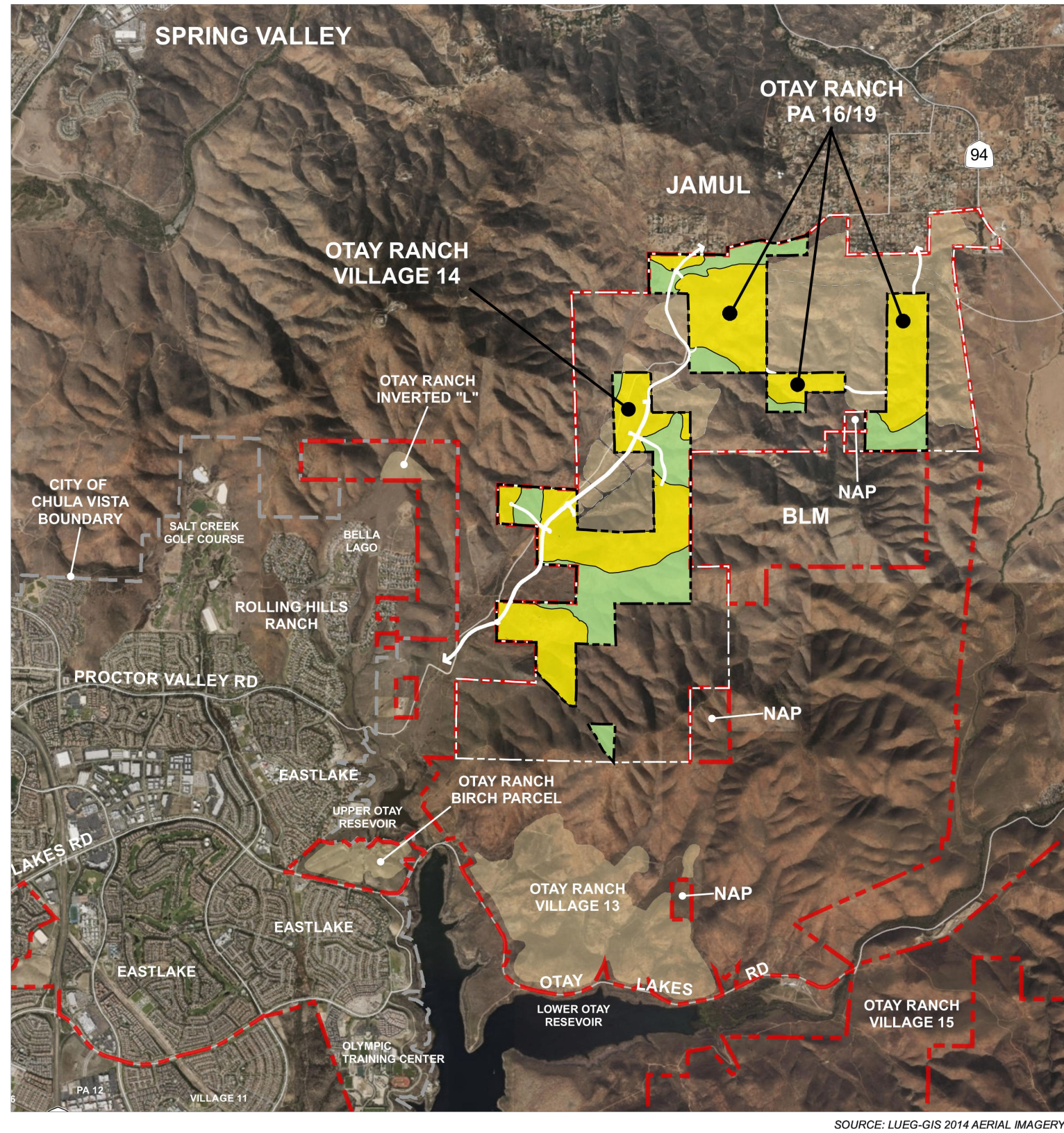
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<sup>1</sup> Includes 97 residential units allocated to school site at 10 DU per Acre per Otay Ranch GDP/SRP policies in the event the school is not constructed. Each technical report evaluates the Proposed Project’s impact assuming the more conservative land use, (i.e. the greater impact), as either an elementary school or as underlying allocated residential units. Footnote will not be repeated.












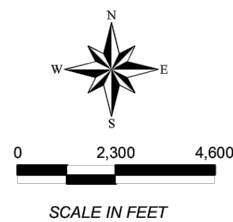
\\ARTIC\DWG\820007\GDP ALTERNATIVE\PV14\_FIGURE 1-2.DWG 12-20-17 11:51:52 LAYOUT: LAYOUT



SOURCE: LUEG-GIS 2014 AERIAL IMAGERY

### LEGEND

- |   |   |
|---|---|
|  OTAY RANCH GDP/SRP BOUNDARY         |  V14 & PA16/19 DEVELOPMENT AREAS |
|  PROPOSED SPECIFIC PLAN BOUNDARY     |  V14 & PA16/19 MSCP OPEN SPACE   |
|  OTAY V14 & PA16/19 VILLAGE BOUNDARY |  OTHER APPROVED DEVELOPMENT      |
|  MUNICIPAL BOUNDARY                  |   |



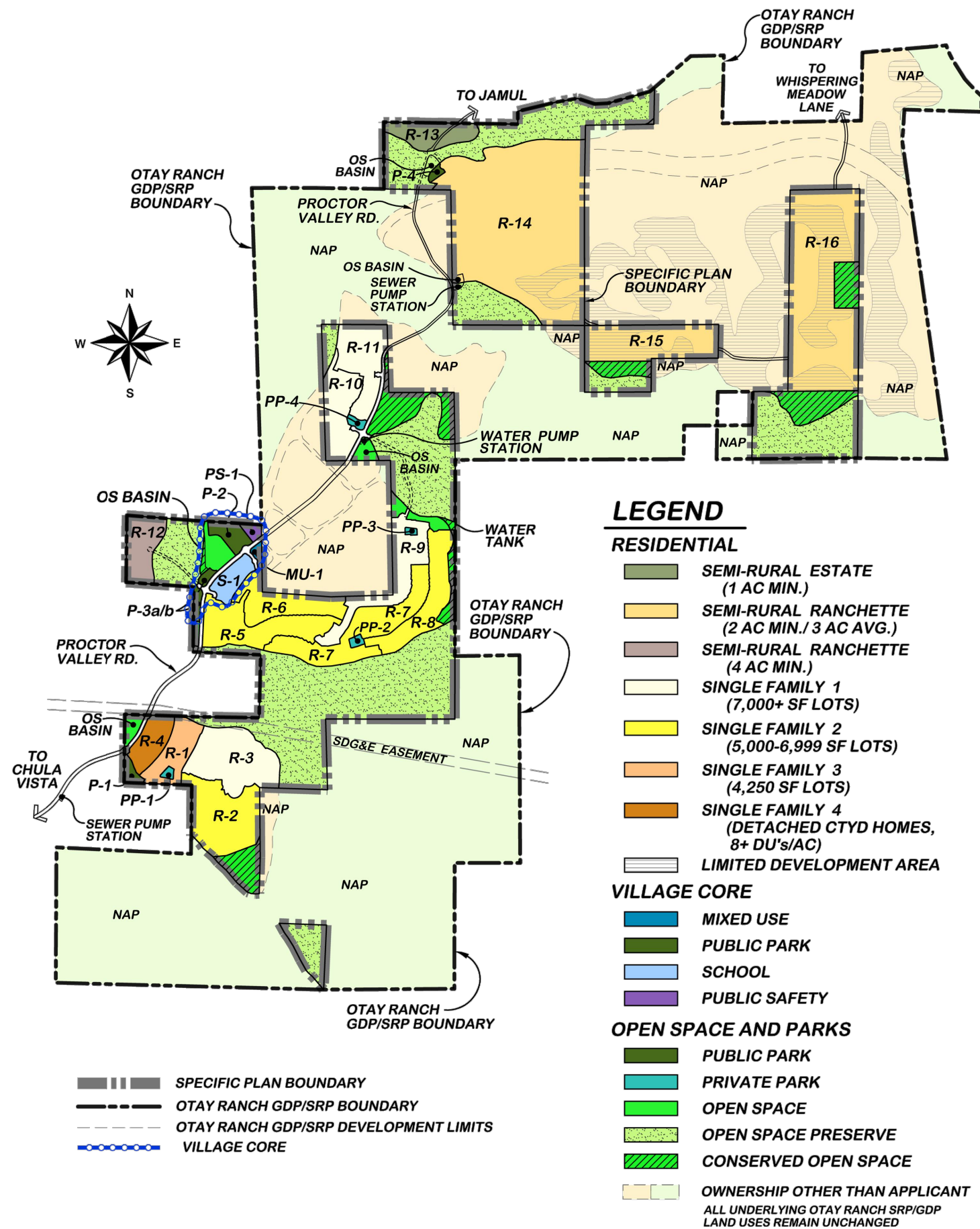
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## FIGURE 1-2

### SURROUNDING LAND USES

VILLAGE 14 AND PLANNING AREA 16/19





08-11-17

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FIGURE 1-3

SITE UTILIZATION PLAN

VILLAGE 14 AND PLANNING AREA 16/19

“Otay Ranch Village 14” Defined: “Otay Ranch Village 14” or “Village 14” as referred to herein is a discrete subset of the Proposed Project and reflects approximately 723.7 acres of the Applicant’s ownership located exclusively within Village 14 as depicted in Figure 1-3. Approximately 994 homes are planned around a Village Core in this area, as shown in Table 1-2 Village 14 Site Utilization Plan Detail.

“Otay Ranch Planning Areas 16/19” Defined: “Otay Ranch Planning Areas 16/19” or “Planning Areas 16/19” is a discrete subset of the Proposed Project and reflects approximately 559.8 acres of the Applicant’s ownership located exclusively within Planning Areas 16/19 as depicted in Figure 1-3. Approximately 125 homes are planned on one-acre and three-acre average lots in this area, as shown in Table 1-3 Planning Area 16/19 Site Utilization Plan Detail. 127.1 acres of Limited Development Area (“LDA”), defined below, is further described in Table 4 LDA Detail.

Limited Development Area (“LDA”) Defined: LDA is a defined land use designation in the Otay Ranch GDP/SRP. “An open space easement will cover the areas designated as ‘Limited Development Area’...These areas will be left as natural open space with the exception that roads and utilities are anticipated to cross or lie within these areas...LDAs may be included within private lots but would have the following set of restrictions. Removal of native vegetation would be prohibited except as necessary for construction of roads and utilities. There would be no buildings or other structure, agriculture, landscaping, livestock, grazing, horses, trash disposal of fences allowed within these areas.” Fuel modification is allowed in the LDA as "brushing for fire control zones would conform to the local fire district regulations". A total of 127.1 acres of LDA in Planning Areas 16/19 is further described in Table 1-4 LDA Detail. There is no LDA in Village 14.

“Otay Ranch RMP” and “MSCP Preserve” Defined: The Otay Ranch Resource Management Plan (RMP) provides for the conservation and management of the entire 11,375-acre Otay Ranch RMP Preserve. The MSCP County Subarea Plan Implementing Agreement describes the County’s required contribution to the MSCP Preserve. The Implementing Agreement states that the required mitigation for Otay Ranch includes “protection of the areas identified as preserved in the boundaries of the Otay Ranch project including approximately 11,375 acres” of the Otay Ranch RMP Preserve. Therefore, the Otay Ranch RMP Preserve is a subset of the MSCP Preserve.

The portion of the Proposed Project’s land use designated as Otay Ranch RMP Preserve, while considered a part of the MSCP County Subarea plan Preserve, is unique to Otay

Ranch because it specifically mitigates for direct and cumulative impacts associated with implementation of the Otay Ranch GDP/SRP. The proposed Project includes 426.7 acres of Otay Ranch RMP preserve, of which 270.2 acres are in Village 14 and 156.5 acres are in Planning Areas 16/19.

“Preserve Conveyance Obligation” Defined: To satisfy assemblage of the 11,375-acre RMP (MSCP) Preserve ranch-wide, a “Preserve Conveyance Obligation” was prescribed in the Otay Ranch RMP. The Preserve Conveyance Obligation is 1.188 acre of Otay Ranch RMP (MSCP) Preserve conveyed per 1 acre of development, as further defined in the adopted Otay Ranch RMP. This obligation, which is the primary basis of Proposed Project’s required mitigation, may be achieved through conveyance of either the Applicant's RMP (MSCP) Preserve ownership or through off-site acquisition within the 11,375 acres Otay Ranch RMP (MSCP) Preserve.

“Conserved Open Space” Defined: “Conserved Open Space” refers to those areas with an Otay Ranch GDP/SRP land use designation other than Otay Ranch RMP Preserve that will be preserved on site and which will either be added to the Otay Ranch RMP Preserve (through a future RMP Amendment), managed under a separate Resource Management Plan, or utilized to mitigate impacts to the City of San Diego MSCP Cornerstone Lands. The approximately 72.4 acres of Conserved Open Space is comprised of 31.9 acres within the 127.1 acres of LDA and 3.6 acres of residential land use designation in Planning Area 16/19 plus 36.9 acres of residential land use designation within Village 14. The Conserved Open Space areas are located adjacent to Otay Ranch RMP Preserve and will be conserved by recording a biological open space easement over the land.

“Development Footprint” Defined: The Development Footprint includes areas where there will either be permanent or temporary ground disturbance. The Development Footprint includes: all on-site development; Off-site improvements; graded LDA; and impacts resulting from infrastructure and other allowable uses within the MSCP Preserve per Section 1.9.3 of the MSCP County Subarea Plan.

“Off-site Improvements” Defined: “Off-site Improvements” total approximately 85.4 acres of both temporary and permanent impacts as shown in Table 1-5 Off-Site Improvements and include the following: Proctor Valley Road, including related wet and dry utilities, drainage facilities and trails; access roads in Planning Area 16; an off-site sewer pump station in the southern reach of Proctor Valley Road and off-site sewer facilities to connect to the Salt Creek Interceptor as planned since 1994.



Proctor Valley Road improvements include: South Proctor Valley Road (0.25 mile in the City of Chula Vista land and 0.2 acres privately owned in the County); South and Central Proctor Valley Road (1.5 miles in City of San Diego Cornerstone land); Central Proctor Valley Road (0.4 mile in CDFW Otay Ranch Village 14 land); and North Proctor Valley Road (0.75 mile in CDFW Otay Ranch land between Village 14 and Planning Area 16/19).

Proctor Valley Road Central and South are proposed to be improved and classified as a two-lane-with-median light collector with a width ranging from 68 to 74 feet, plus an additional 20-foot-wide fuel modification/construction easement on each side. Proctor Valley Road north is a two-lane interim road with a paved width of 28 feet in a 40-foot-side right-of-way. Improvements in Proctor Valley Road would include those typically in roadways, including wet and dry utilities, a sewer pump station, drainage, landscape, culverts, and trails. Proctor Valley Road is an approved County General Plan mobility element road and an approved facility in the MSCP County Subarea Plan.

In addition, there are three public off-site roads within Planning Area 16. These roads are located primarily within CDFW managed lands and are approved in the Otay Ranch GDP/SRP as facilities within designated development or LDA land use, (and are also approved facilities per the MSCP County Subarea Plan Section 1.9.3.3). Improvements in these off-site roads would include those typically in roadways, including wet and dry utilities, drainage, landscape, culverts, and trails.

## **PROPOSED SPECIFIC PLAN**

### **Summary**

The adopted Otay Ranch GDP/SRP requires the preparation of a Specific Plan, which includes a Site Utilization Plan to describe the land uses for the Proposed Project. Figures 1-2 and 1-3 depict the proposed Site Utilization Plan. Tables 1-1 to 1-5 quantify the proposed land uses.

Approximately 994 homes are planned in Village 14, set in three distinct areas (referred to herein as the South, Central and North Village 14). 878 of these homes will be single-family homes located in gated enclaves and 116 will be detached courtyard homes. Twelve neighborhoods are planned with approximate densities ranging from 0.2 to 10.0 dwelling

units per acre. Otay Ranch Village 14 is planned around a “Village Core”, centrally located in the heart of the village. The Village Core is comprised of a 9.7-acre elementary school; a 7.2-acre Village Green (public park); a 1.7-acre Mixed Use Site with up to 10,000 square feet of commercial/retail uses; and a 2.3-acre public safety site for a fire station and satellite sheriff's facility. Additional public and private parks, swim clubs, trails and recreational facilities will be situated throughout South, Central and North Village 14. See Table 1-2 for detailed land uses in Village 14.

In addition to the homes in Village 14, there are 13 one-acre average sized estate lots proposed in Planning Area 19 and 112 three-acre average sized ranchettes proposed in Planning Area 16. Planning Area 16/19 neighborhoods will not be gated. The Limited Development Area may include public infrastructure, and/or be included in the private lots with a conservation easement. See Tables 1-3 and 1-4 for detailed land uses in Planning Area 16/19.

The Proposed Project's Specific Plan is designed around an active lifestyle and wellness recreation theme and includes a park and recreation system including four public parks totaling approximately 15.2 acres. The remaining private recreation facilities include three private swim clubs, and numerous pocket parks totaling approximately 9.5 acres. An approximately 4.5 mile, 10-foot wide decomposed granite Community Pathway is proposed along Proctor Valley Road from Chula Vista to Jamul. The Proposed Project includes approximately 27.9 acres of open space, (exclusive of the 110.1 acres of open space included in the residential gross acres), 127.1 acres of LDA and 426.7 acres of Otay Ranch RMP Preserve within the Applicant's ownership. Of note, there is approximately 72.4 acres of Conserved Open Space within the proposed Project that will be conserved by recording a biological open space easement.

**Table 1-1**  
**Village 14 and Planning Areas 16/19**  
**Site Utilization Plan Summary**  
**January 9, 2018**

Description	Village 14		Planning Area 16/19		Total Proposed Project	
	Gross Acres (1,2)	Target Units (3)	Gross Acres (4,5)	Target Units	Gross Acres	Target Units
<b>Residential Subtotal</b>	344.2	897.0	363.6	125	707.7	1,022
Residential Use on School Site (9.7 acres) (3)		97				97
<b>Non-Residential Uses</b>						
Mixed Use (6)	1.7				1.7	
Public Parks	13.8		1.4		15.2	
Private Parks/Recreation (2)	4.5				4.5	
Public Safety Site	2.3				2.3	
Elementary School Site (3)	9.7				9.7	
Open Space	27.6		2.1		29.7	
Conserved Open Space	36.9		35.5		72.4	
Otay Ranch RMP Preserve	270.2		156.5		426.7	
Circulation	12.7		0.8		13.6	
<b>Non-Residential Uses Subtotal</b>	379.5	-	196.3		575.8	-
<b>Total Proposed Project</b>	<b>723.7</b>	<b>994</b>	<b>559.8</b>	<b>125</b>	<b>1283.5</b>	<b>1,119</b>

**Notes**

- (1) Residential gross acres in Village 14 includes 96.0 acres of related internal slopes, fuel modification and/or preserve edge.
- (2) Village 14 has 5.0 acres of private pocket parks included in the residential acreage; therefore the subtotal including PPP is 9.5 acres.
- (3) Units allocated to school site at 10 DU/ac per the Otay Ranch GDP/SRP policies. Should school site not be needed, 97 units may be built.  
Should the school site be needed, the Total Target Units is 897 in Village 14 and 1,022 total.
- (4) Residential gross acres in Planning Area 16/19 includes 14.1 acres of related private lift and pump stations.
- (5) Residential gross acres in Planning Area 16/19 includes 127.1 acres of limited development area (LDA). See Table 4 for details.
- (6) Village 14 Mixed Use acreage includes 10,000 sf of commercial use.
- (7) 85.4 acres of offsite impacts are in excluded from the acreage above. See Table 5 for details.

**Table 1-2**  
**Village 14**  
**Site Utilization Plan Detail**  
**January 9, 2018**

Description	Gross Acres (1,2)	Target Units	Density
<b>Single Family Residential</b>			
R-1            50*85	18.0	81	4.5
R-2            60*100	38.5	82	2.1
R-3            71*100	41.1	73	1.8
R-4            Courtyard	13.8	116	8.4
R-5            50*100	35.1	103	2.9
R-6            60*100	25.7	71	2.8
R-7            60*85	40.7	108	2.7
R-8            60*100	28.7	75	2.6
R-9            75*100	30.0	74	2.5
R-10          70*85	25.1	49	1.9
R-11          80*100	28.6	61	2.1
R-12          4 ac min	18.9	4	0.2
<b>Single Family Residential Subtotal</b>	<b>344.2</b>	<b>897</b>	<b>2.6</b>
Residential Use on School Site (9.7 acres) (3)		97	
<b>Non-Residential Uses</b>			
Mixed Use (4)    MU - C	1.7		
<b>Public Parks</b>			
P-1            South Park	2.9		
P-2            Village Green Park	7.2		
P-3            Scenic Park	3.7		
<b>Public Parks Subtotal</b>	<b>13.8</b>		
<b>Private Parks &amp; Recreation</b>			
PP-1          South	1.0		
PP-2          Central	1.2		
PP-3          Private Park	0.7		
PP-4          North	1.5		
PPP (4)       Various	0.0		
<b>Private Parks/Recreation Subtotal</b>	<b>4.5</b>		
<b>Public Safety Site</b>	<b>2.3</b>		
<b>Elementary School Site (3)</b>	<b>9.7</b>		
<b>Open Space</b>	<b>27.6</b>		
<b>Conserved Open Space</b>	<b>36.9</b>		
<b>Otay Ranch RMP Preserve</b>	<b>270.2</b>		
<b>Circulation - Arterial</b>	<b>12.7</b>		
<b>Non-Residential Uses Subtotal</b>	<b>379.5</b>		
<b>Village 14 Subtotal</b>	<b>723.7</b>	<b>994</b>	<b>1.4</b>

**Notes**

- (1) Residential gross acres includes 96.0 acres of related internal slopes, fuel modification and/or preserve edge open space lots.  
(2) Village 14 has 5.0 acres of private pocket parks included in the residential acreage; therefore the subtotal including PPP is 9.5 acres built.  
Should the school site be needed, the Total Target Units is 897.  
(4) Village 14 Mixed Use acreage includes 10,000 sf of commercial use.  
(5) Off-site impacts are in excluded from the acreage above. See Table 5 for details.

**Table 1-3**  
**Planning Areas 16/19**  
**Site Utilization Plan Detail**  
**January 9, 2018**

Description	Gross Acres (1,2)	Target Units	Density
<b>Residential Uses</b>			
R-13          Estates 1/2 acre min	13.4	13	1.0
R-14          Ranchettes 2 acre min	192.0	71	0.4
R-15          Ranchettes 2 acre min	41.9	11	0.3
R-16          Ranchettes 2 acre min	116.3	30	0.3
<b>Residential Subtotal</b>	<b>363.55</b>	<b>125</b>	<b>0.3</b>
<b>Non-Residential Uses</b>			
Public Park P-4   Northern Park	1.4		
<b>Open Space</b>	<b>2.1</b>		
<b>Conserved Open Space</b>	<b>35.5</b>		
<b>Otay Ranch RMP Preserve</b>	<b>156.5</b>		
<b>Circulation Arterial</b>	<b>0.8</b>		
<b>Non-Residential Uses Subtotal</b>	<b>196.3</b>		
<b>Planning Area 16/19 Subtotal</b>	<b>559.8</b>	<b>125.0</b>	<b>0.2</b>

**Notes**

- (1) Gross acres includes 127.1 acres of limited development area (LDA). See Table 4 for details.  
(2) Residential gross acres includes 14.1 acres of related private lift and pump stations open space lots.  
(3) Off-site impacts are in excluded from the acreage above. See Table 5 for details.

**Table 1-4**  
**Planning Areas 16/19**  
**Limited Development Area (LDA) Detail**  
**January 9, 2018**

Description	Component Acres		Acres
	LDA	Other	Total
<b>Residential Uses</b>			
R-13 Estates 1 acre avg	0.0	13.4	13.4
R-14 Ranchettes 3 acre avg	17.3	174.7	192.0
R-15 Ranchettes 3 acre avg	27.1	14.8	41.9
R-16 Ranchettes 3 acre avg	50.9	65.4	116.3
<b>Residential Subtotal (5)</b>	<b>95.3</b>	<b>268.3</b>	<b>363.6</b>
<b>Non-Residential Uses</b>			
Public Park P Northern Park		1.4	1.4
Open Space		2.1	2.1
Conserved Open Space	31.9	3.6	35.5
MSCP Preserve		156.5	156.5
Circulation Arterial		0.8	0.8
<b>Non-Residential Uses Subtotal</b>	<b>31.9</b>	<b>164.4</b>	<b>196.3</b>
<b>Planning Area 16/19 Subtotal</b>	<b>127.1</b>	<b>432.7</b>	<b>559.8</b>

**Table 1-5**  
**Village 14 and Planning Areas 16/19**  
**Off-Site Infrastructure (Temporary + Permanent)**  
**January 9, 2018**

Off-site (1)	Location	Acres		
		ROW	Temporary	Total
<b>Proctor Valley Road - MSCP Planned Facility (2)</b>				
South	City of Chula Vista	2.3	2.8	5.1
South	City of San Diego	10.1	17.6	27.7
Central	City of San Diego	2.8	4.3	7.1
Central	State	4.1	8.6	12.7
North	State	3.6	13.2	16.8
North	County of SD Easement	0.1	0.2	0.3
<b>PA 16 Access Roads - MSCP Allowed Facility (2)</b>				
R-14 to R-15	State	0.3	1.0	1.3
R-15 to R-16	State	1.6	7.2	8.8
R-16 to Whispering Meadows	State	1.5	4.2	5.7
<b>Sewer Trunk Line to Salt Creek Interceptor (3)</b>	City of Chula Vista	--	--	--
<b>Total</b>		<b>26.4</b>	<b>59.0</b>	<b>85.4</b>

**Notes**

- (1) Off-sites include all road improvements, sewer, water, drainage and related utilities.  
(2) See section 1.9.3 of the MSCP for planned and allowed facilities.  
(3) In existing improved Proctor Valley Road to approximate tie in at Hunte Parkway

## **SEWER SERVICE**

Sewer service to the Proposed Project will be provided by the San Diego County Sanitation District (SDCSD) via a sewage transportation agreement with the City of Chula Vista for service from the Salt Creek Interceptor. This will require the construction of off-site facilities to convey flow to the upstream end of the Salt Creek Interceptor. This agreement (Appendix C) is for a defined service area that includes the planned Villages and Planning Areas of Otay Ranch. This agreement precludes any sewer connections for parcels outside of the unincorporated Otay Ranch Villages and Planning Areas.

## CHAPTER 2

### DESIGN CRITERIA

This chapter presents the design criteria used in master planning sewer facilities for the Proposed Project. Sewer facility sizing is based on SDCSD criteria, unless otherwise noted. Final design criteria and specifications for all sewage facilities shall comply with all County requirements and policies and will be subject to review and approval by the Director of Public Works and regulatory agencies.

#### Sewage Flows

The sewage generation factors used to project average flows from the Proposed Project are summarized in Table 2-1. Sewage flow factors for SDCSD are based on criteria approved by the County for similar and recent projects.

<b>TABLE 2-1 SEWAGE GENERATION FACTORS</b>	
<b>Land Use</b>	<b>Average Flow Factor</b>
Single Family Residential	240 gpd/unit <sup>1</sup>
Multi-Family Residential	192 gpd/unit
Public Safety	1,500 gpd/acre <sup>2</sup>
Commercial	1,500 gpd/acre <sup>2</sup>
Elementary School	4.8 gpd/student
Parks	500 gpd/acre <sup>2</sup>

<sup>1</sup> Gallons per day/unit

<sup>2</sup> In the absence of specific criteria from the County, typical values were used for these land use categories.



## **Peaking Factor**

To convert average daily flow to peak dry weather flow, the SDCSD will use the population based peaking factor equation from the City of San Diego Sewer Design Guide (2015). This peaking factor equation has been included in Appendix A for reference. A sewage generation factor of 80 gallons per day (gpd) per person was utilized to convert average daily flows to an equivalent population.

## **Gravity Sewers**

All existing and proposed gravity sewers are designed per SDCSD requirements to convey peak dry weather flow. For pipes with a diameter of 15-inches and smaller, the sewers have been designed to convey this flow when flowing half full. For pipes with a diameter of 18-inches and above, the sewers have been designed per District requirements to convey peak dry weather flow when flowing three-fourths full by depth. Manning's equation with  $n = 0.013$  was used to size all gravity sewers. All new sewers were designed to maintain a minimum velocity of two feet per second at design capacity to prevent the deposition of solids.

## **Public Lift Stations**

The County of San Diego does not have established detailed design standards for public lift stations. On recent projects, the SDCSD has used City of San Diego Guidelines for lift stations as a reference. Lift station design capacity and emergency overflow storage volumes will be reviewed and approved by the Director of Public Works at the preliminary design phase of the lift station. Some of the pertinent criteria from the design of a recent public lift station in the SDCSD are as follows:

- Dual force mains are required.
- Redundant pumping units are required.
- Cast-in-place wet well/dry well arrangement with control room in building at grade.
- Pumping units shall be sized for peak wet weather gravity flow plus pumped flow of upstream lift stations, if any.
- Redundant power source such as diesel generator is required.
- Noise ordinance requirements must be met at property lines.

- Stations to include SCADA system to remotely notify Sanitation Agency of station status and alarms.
- Overflow storage equivalent to 6 hours of peak wet weather influent gravity flow is required. Two hours is standard, but the City of San Diego requires six hours in areas where maximum protection from spillage is required.
- Odor control system, Bioxide or equal, is required.
- Station to include adequate access and turn around space for large vehicles. Site requirements are incorporated into the design of Proctor Valley Road.

### **Private Lift Stations**

Private lift stations must be processed and approved by the County of San Diego Planning and Development Services, Building Permit Division and generally follow guidelines adopted by the City of San Diego for Private Sewer Lift Stations. Some of the pertinent criteria from recently approved private lift stations include the following:

- Redundant pumping units. Grinder pumps are typical.
- Redundant power source such as a diesel engine generator.
- Noise ordinance requirements must be met at adjacent property lines.
- Telephone telemetry or similar for remote alarm indication.
- Overflow storage equivalent to a minimum of six hours of peak wet weather flow.
- Adequate access for maintenance.

## CHAPTER 3

### PROJECTED SEWAGE FLOWS

Based on the sewage generation factors presented in Chapter 2 and the development plan for the Proposed Project, Table 3-1 provides the projected wastewater flows for the Proposed Project. Table 3-2 summarizes the projected average and peak dry weather flows.

<b>TABLE 3-1</b> <b>VILLAGE 14 AND PLANNING AREAS 16/19</b> <b>PROJECTED SEWAGE FLOWS</b>					
<b>Neighborhood</b>	<b>Land Use Designation</b>	<b>Quantity</b>	<b>Sewage Generation Factor</b>	<b>Total Average Sewage Flow, GPD</b>	<b>EDU's</b>
<b>Village 14</b>					
R-1	SF Residential	81 units	240 gpd/unit	19,440	81
R-2	SF Residential	82 units	240 gpd/unit	19,680	82
R-3	SF Residential	73 units	240 gpd/unit	17,520	73
R-4	Residential	116 units	192 gpd/unit	22,272	92.8
R-5	SF Residential	103 units	240 gpd/unit	24,720	103
R-6	SF Residential	71 units	240 gpd/unit	17,040	71
R-7	SF Residential	108 units	240 gpd/unit	25,920	108
R-8	SF Residential	75 units	240 gpd/unit	18,000	75
R-9	SF Residential	74 units	240 gpd/unit	17,760	74
R-10	SF Residential	49 units	240 gpd/unit	11,760	49
R-11	SF Residential	61 units	240 gpd/unit	14,640	61
R-12	SF Residential	4 units	240 gpd/unit	960	4
MU-C	Commercial	1.7 ac	1,500 gpd/ac	2,550	10.6
P-1	Park	2.9 ac	500 gpd/ac	1,450	6
P-2	Park	7.2 ac	500 gpd/ac	3,600	15
P-3	Park	3.7 ac	500 gpd/ac	1,850	7.7
PP-1	Park	1.0 ac	500 gpd/ac	500	2.1
PP-2	Park	1.2 ac	500 gpd/ac	600	2.5
PP-3	Park	0.7 ac	500 gpd/ac	350	1.5
PP-4	Park	1.5 ac	500 gpd/ac	750	3.1
PPP	Park	5.0 ac	500 gpd/ac	2,500	10.4
FS-1	Public Safety	2.3 ac	1,500 gpd/ac	3,000	14.4

**TABLE 3-1  
VILLAGE 14 AND PLANNING AREAS 16/19  
PROJECTED SEWAGE FLOWS**

Neighborhood	Land Use Designation	Quantity	Sewage Generation Factor	Total Average Sewage Flow, GPD	EDU's
S-1 <sup>1</sup>	School	9.7 ac/97 Units	192 gpd/unit	18,624	77.6
<b>Subtotal Village 14</b>				<b>245,486</b>	<b>1,023</b>
<b>Planning Areas 16/19</b>					
R-13	SF Residential	13 units	240 gpd/unit	3,120	13
R-14	SF Residential	71 units	240 gpd/unit	17,040	71
R-15	SF Residential	11 units	240 gpd/unit	2,640	11
R-16	SF Residential	30 units	240 gpd/unit	7,200	30
P-4	Park	1.4 ac	500 gpd/ac	700	2.9
<b>Subtotal Planning Areas 16/19</b>				<b>30,700</b>	<b>128</b>
<b>Total</b>				<b>276,186</b>	<b>1,151</b>

<sup>1</sup> Units allocated to school site at 10 DU/ac per Otay Ranch GPD/SRP policies. Sewer flows were projected based on the residential unit allocation to be conservative (77.6 EDUs as residential versus 800 students x 4.8 gpd/student = 3,840 gpd = 16 EDUs as school).

**TABLE 3-2  
VILLAGE 14 AND PLANNING AREAS 16/19  
PROJECTED SEWAGE FLOW SUMMARY**

Agency	Average Flow, mgd	Peak Factor	Peak Flow, mgd
San Diego County Sanitation District	0.28	2.11	0.58

## **CHAPTER 4**

### **EXISTING SEWER FACILITIES**

This chapter describes the existing sewer system that is pertinent to the development of the Proposed Project. A brief discussion of the existing City of Chula Vista facilities in the vicinity of the proposed project is provided below.

#### **City of Chula Vista – Salt Creek Interceptor**

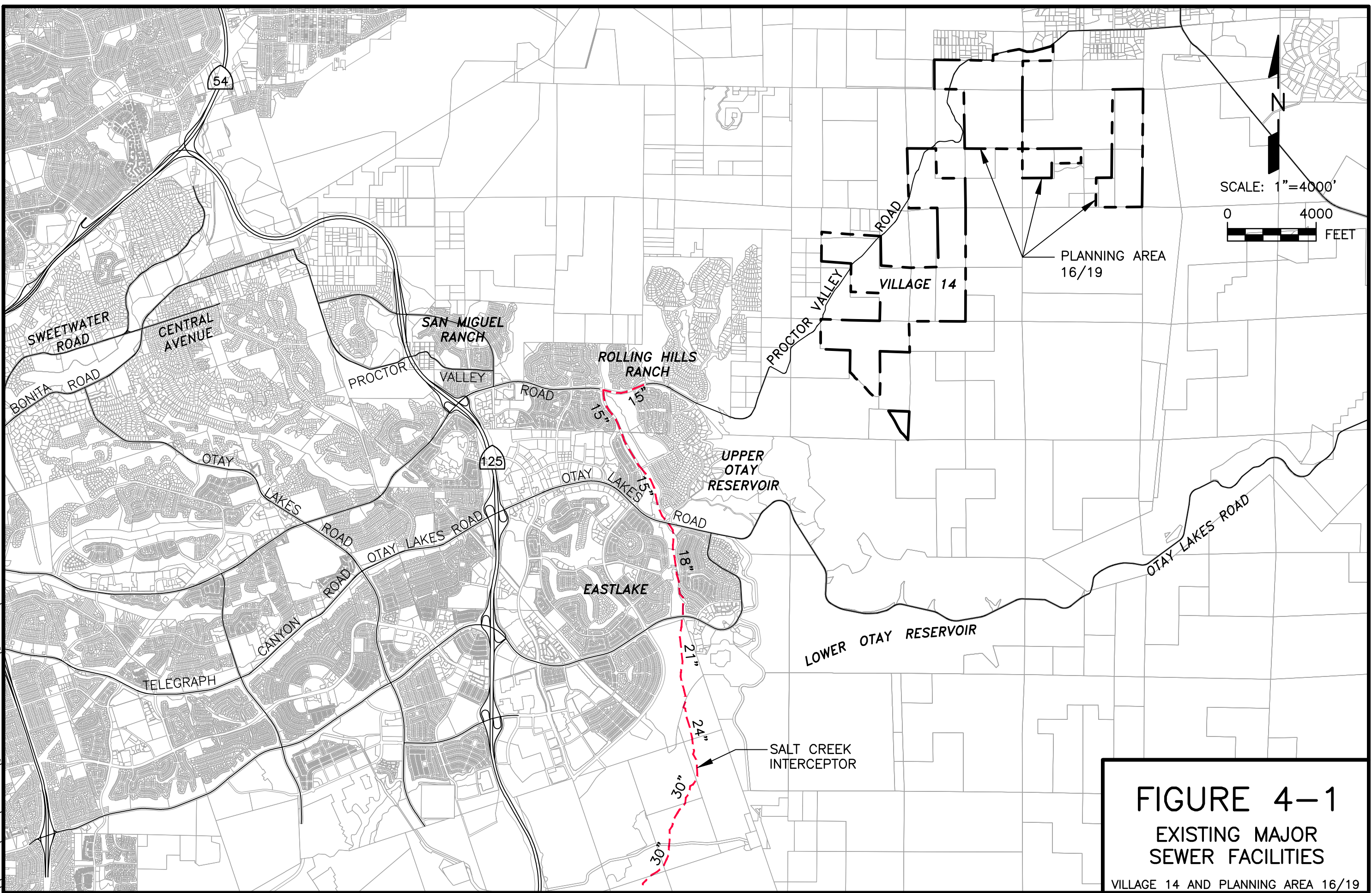
The major Chula Vista sewer facility located in the vicinity of the Proposed Project site is the Salt Creek Interceptor. The Salt Creek Interceptor has been sized to accommodate the ultimate development in a designated service area which includes the Proposed Project site. The Proposed Project was included in planning studies for the Salt Creek Interceptor dating back to 1994. The Salt Creek Interceptor ranges from a 15-inch line to a 48-inch line and conveys flow to the Metro sewer system. The upstream end of the Salt Creek Interceptor is located in Proctor Valley Road approximately 1,600 feet east of Hunte Parkway, approximately two miles west of the Proposed Project site. Figure 4-1 depicts the Salt Creek Interceptor's location relative to the Proposed Project.

#### **San Diego County Sanitation District**

The SDCSD has an agreement with the City of San Diego for treatment and disposal of sewage. The capacity rights of the Spring Valley Sanitation District (SVSD) and other sanitation districts have been consolidated and placed under the control of the SDCSD. The Proposed Project is located in the County of San Diego and the proposed sewer system will be served by the SDCSD. Annexation into the SDCSD along with an amendment to the SDCSD's sphere of influence boundary will be required and will be a discretionary action of the San Diego Local Agency Formation Commission (LAFCO). As a County project, sewer treatment capacity will be provided by SDCSD which has sufficient capacity rights in the City of San Diego's Metropolitan (Metro) sewer system.



\\ARTIC\DWG\820007\GDP ALTERNATIVE\SEWER\PV14\_FIGURE 4-1-S.DWG 02-07-18 13:53:34 LAYOUT: 4-1



**FIGURE 4-1**  
**EXISTING MAJOR**  
**SEWER FACILITIES**

VILLAGE 14 AND PLANNING AREA 16/19

## CHAPTER 5

### PROPOSED SEWER FACILITIES

This chapter presents the sewer facilities required for providing service to the Proposed Project through the Salt Creek Interceptor. In previous planning studies prepared for the Salt Creek Interceptor dating back to November 1994, flows from the Proposed Project site have been included in the sizing of this interceptor.

In providing sewer service through the Salt Creek Interceptor, the Proposed Project will remain in the County and be annexed into and served by the SDCSD, but a sewage transportation agreement between SDCSD and the City of Chula Vista allows flows from the Proposed Project to be conveyed to the Salt Creek Interceptor. A copy of this sewage transportation agreement is provided in Appendix C. The Proposed Project will be required to annex into SDCSD and amend the SDCSD's sphere of influence boundary. This will require discretionary approval from LAFCO.

To convey flows from the Proposed Project to the Salt Creek Interceptor, an offsite permanent sewage lift station, force mains, and additional offsite improvements will be required. These facilities, discussed in detail below, will convey flows to the upstream end of the Salt Creek Interceptor within Rolling Hills Ranch.

#### **Onsite Sewer Facilities**

A brief description of the onsite sewer facilities for the Proposed Project is provided below. The majority of facilities are to be operated and maintained by the SDCSD, but there are some local facilities in Planning Areas 16/19 that are proposed to be private. Final design criteria and specifications for all proposed sewage facilities shall comply with all County requirements and policies and will be subject to review and approval by the Director of Public Works and appropriate regulatory agencies.

**Gravity Sewers.** Figures 5-1 and 5-2 provide the proposed sewer system layout and sizing for the Proposed Project. The sewer lines initially have been sized assuming a minimum pipe slope of 1.0 percent. This assumption should be verified once street and sewer line slopes have been better defined. This should be done by updating the onsite sewer system sizing analysis at the outset of final engineering for the Proposed Project. Lift station

design capacity and overflow storage volumes will be reviewed and approved by the Director of Public Works at the preliminary design phase of the lift station. The following public lift station design parameters are planning level guidelines only.

**Public Lift Stations.** Two public lift stations are necessary to convey flow from the Proposed Project. The lift station sites and any necessary easements will be conveyed to the County of San Diego. The recommended location for these stations are shown on Figures 5-1 and 5-2.

The southerly offsite lift station along Proctor Valley Road would be sized with capacity for the entire Proposed Project site. The required capacity of that lift station is approximately 600 gpm to accommodate peak gravity flows. The capacity of the lift station was determined by calculating the peak dry weather flow to the lift station. This peak dry weather flow was then multiplied by a 1.25 factor of safety to account for impeller wear and infiltration. The pumped flow from the station that will serve Planning Areas 16/19 was then added to the capacity requirement. Dual 8-inch force mains would convey flows from the lift station with one force main acting as a standby. Force main velocity would be 3.8 feet per second at design capacity. To provide 6 hours of peak flow storage for flows tributary to this station, an overflow volume of approximately 125,000 gallons is required.

Another public sewer lift station will be required to pump flows from Planning Areas 16/19 southerly to the Village 14 collection system. Although this lift station will only provide service to 125 homes, it is recommended to oversize the lift station capacity to 140 gpm to provide a minimum velocity of 3.5 feet per second in a 4-inch force main. Dual 4-inch force mains will be provided. To provide 6 hours of peak flow storage for flows tributary to the station, including flows pumped from private lift stations, an overflow volume of approximately 25,000 gallons is required.

The lift stations will be designed to include redundant pumping units, standby power, odor control, overflow storage, and SCADA supported telemetry. The lift station sites will also be designed with adequate access to all equipment items and include fencing for security. The southerly lift station site has been incorporated into the design for the Proctor Valley Road improvements and will, therefore, not result in additional impacts to the City of San Diego's Cornerstone Properties other than those that have already been analyzed. The southerly lift station and force mains will be operated and maintained by the SDCSD to the point of connection with the City of Chula Vista gravity sewer system.



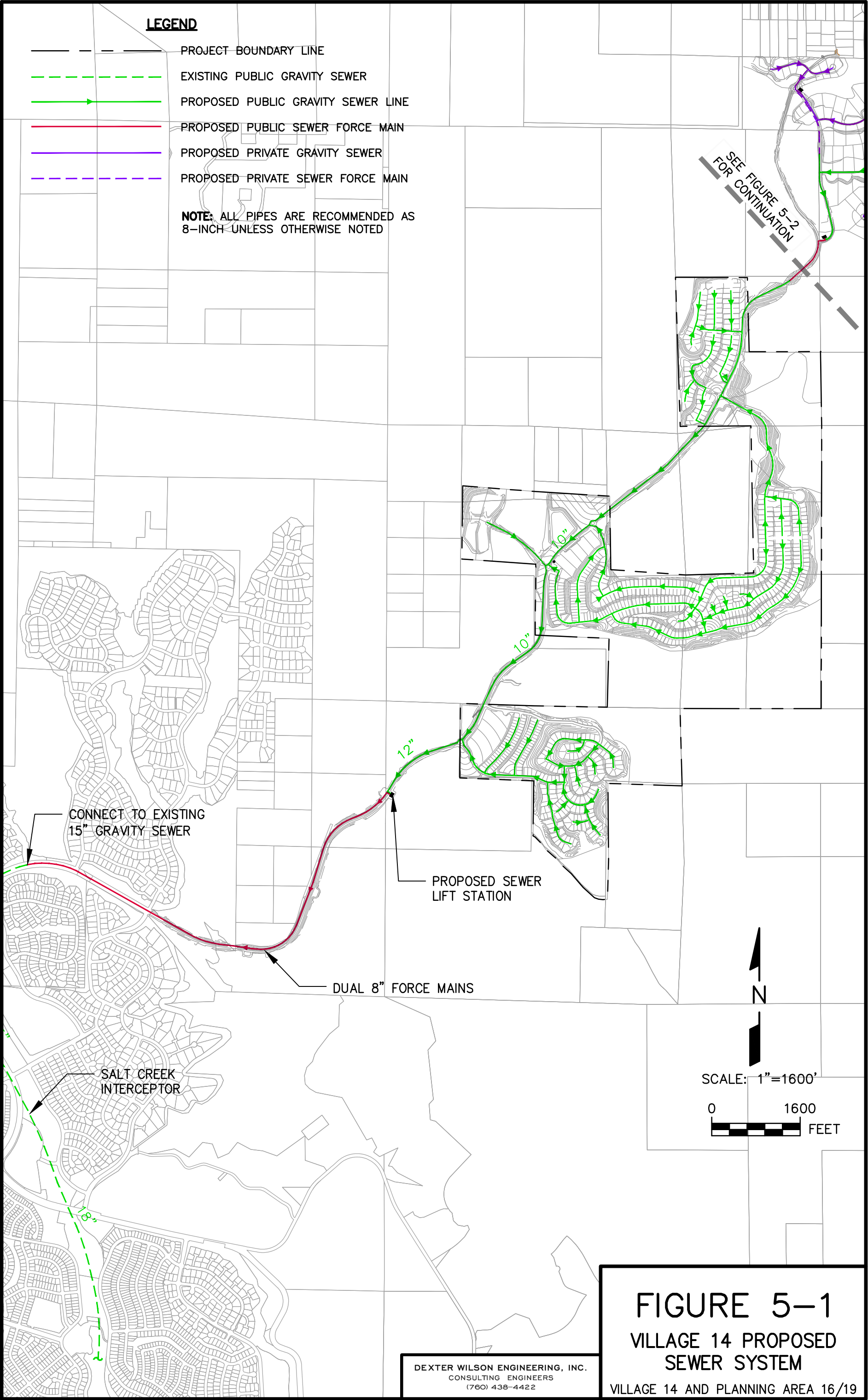
**Private Lift Stations.** As shown on Figure 5-2, a total of four private lift stations are proposed in Planning Areas 16/19 as a result of the topography in this area. These stations will serve from 10 to 40 residential lots and will convey flows through private sewer force mains to the proposed 8-inch public gravity sewer line in the area.

### **Operation and Maintenance**

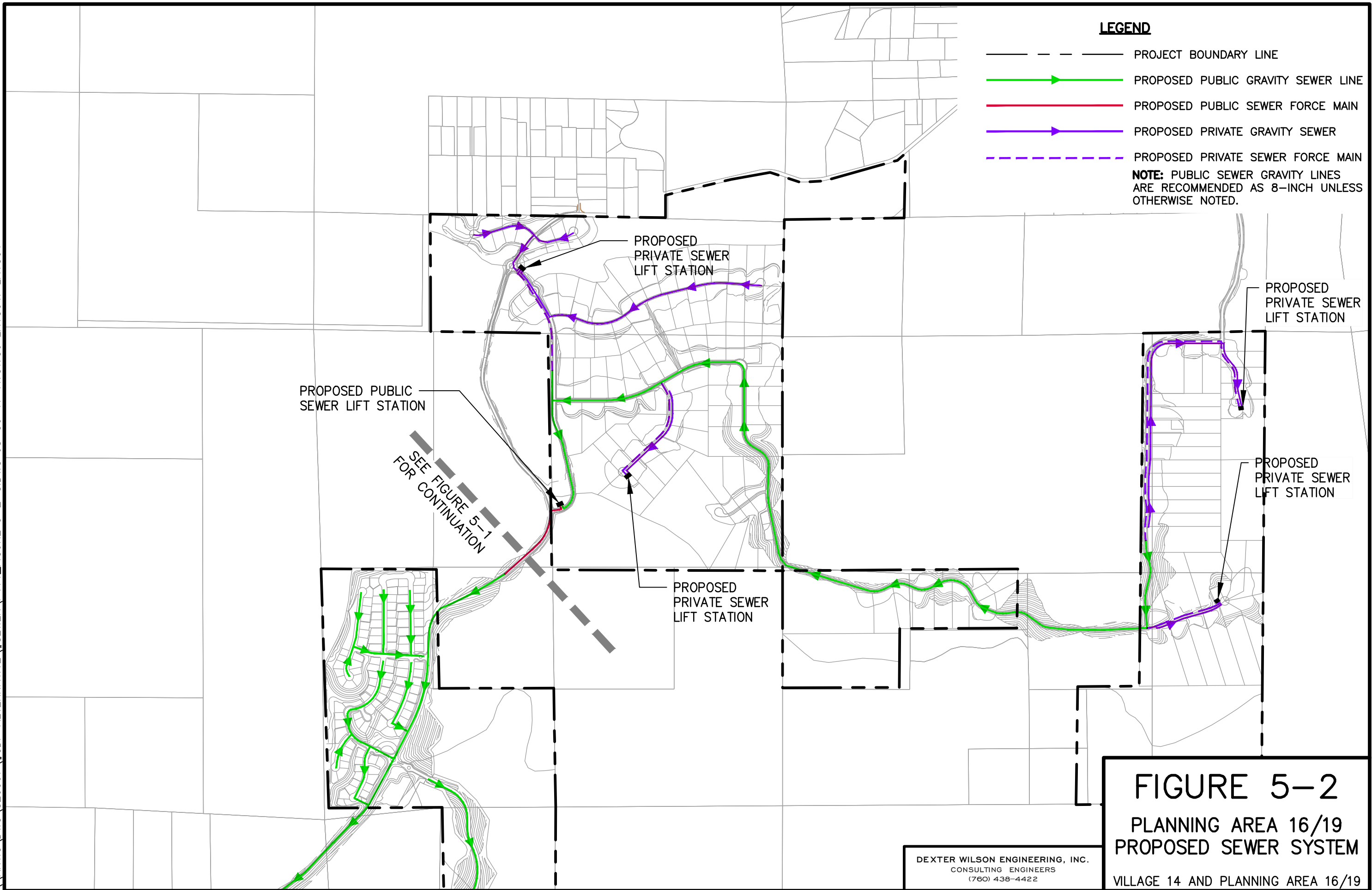
The public sewer lift stations will represent an ongoing operation and maintenance obligation for the operating agency. Table 5-1 provides a preliminary estimate for the annual operation and maintenance costs for public sewer lift stations of the size proposed for the Proposed Project.

<b>TABLE 5-1 PUBLIC LIFT STATION ANNUAL OPERATION AND MAINTENANCE ESTIMATE</b>			
<b>Description</b>	<b>Annual Quantity</b>	<b>Unit Cost</b>	<b>Total Cost</b>
<b>Southerly Station (600 gpm)</b>			
Energy	90,000 kwhr	\$0.32/kwhr	\$28,800
Bioxide	7,000 gal	\$2.50/gal	\$17,500
Generator Testing	24 hrs	\$100/hr	\$2,400
Routine Maintenance & Inspection	1460 hrs	\$100/hr	\$146,000
Parts & Fuel	---	---	\$10,000
Emergency Response	1	10,000	\$10,000
<b>Subtotal Southerly Station</b>			<b>\$214,700</b>
<b>Northerly Station (140 gpm)</b>			
Energy	20,000 kwhr	\$0.32/kwhr	\$6,400
Bioxide	1,500 gal	\$3.00/gal	\$4,500
Generator Testing	24 hrs	\$100/hr	\$2,400
Routine Maintenance & Inspection	500 hrs	\$100/hr	\$50,000
Parts & Fuel	---	---	\$10,000
Emergency Response	1	10,000	\$10,000
<b>Subtotal Northerly Station</b>			<b>\$83,300</b>
<b>TOTAL</b>			<b>\$298,000</b>

Assuming a yearly cost of \$298,000 and an interest rate of 6.0%, the net present cost of operating both stations over a 20 year period would be approximately \$3,418,000.



\\ARTIC\DWG\820007\GDP ALTERNATIVE\SEWER\PV14\_FIGURE 5-2-S.DWG 08-30-17 11:51:30 LAYOUT: LAYOUT



**Private Sewer Facilities.** The proposed private sewer facilities will be operated and maintained by a private Homeowner's Association (HOA). It will be the responsibility of the HOA to collect monies for routine costs such as power, generator testing and maintenance/inspection as well as periodic replacement of major equipment components. The covenants, conditions, and restrictions (CC&Rs) of the HOA will enforce the obligation to fund costs for operation and maintenance of these private lift stations and will ensure that this obligation runs with the land.

Subject to operations, maintenance, and design conditions, DPW, Wastewater Management (San Diego County Sanitation District) would have no objections relative to proposed private sewer infrastructures and facilities within Planning Areas 16/19. Conditions and requirements may include but not limited to the following:

- For the design approval, permitting and inspection of all proposed private sewer facilities, the applicant/owner must comply with all engineering requirements, codes and policies in effect as applied by Planning and Development Services, Building Permit Division.
- An approval of sewer connection agreement between the property owner and San Diego County Sanitation District (County).
- Preparation and submittal of a Sewer System Management Plan (SSMP) of the private sewer system that outlines a preventative maintenance program, contracted maintenance vender(s) and emergency procedures and contact information
- Implementation of low flow operational provisions if determined necessary to mitigate impacts of having low discharge volumes into the sewer system.
- Recordation of Home Owner's Association (HOA) covenants, conditions, and restrictions (CC&R's) obligating HOA to pay all costs for maintenance and operation of the on-site private sewer system in conformance with the SSMP and District ordinances.

### **Offsite Sewer Facilities**

A short section of offsite gravity sewer is required to get flow to the southerly lift station and from there sewage flows would be conveyed to the existing Salt Creek Sewer Interceptor along Proctor Valley Road. Sewer mains would be installed within Proctor Valley Road Right-of-Way and the 8-inch force mains would be installed to the existing 15-inch gravity main located in Proctor Valley Road, approximately 1,600 feet to the east of Hunte Parkway. Figure 5-1 depicts the location of the proposed off-site facilities necessary to connect to the existing Salt Creek Interceptor system and the proposed onsite system for Village 14. Figure 5-2 provides the proposed sewer system layout for Planning Areas 16/19.

### **Salt Creek Interceptor – Capacity**

The November 1994 Salt Creek Basin Study estimated that 2,223 equivalent dwelling units (EDUs) from Proctor Valley Village 14 and Planning Areas 16 and 19 would convey flows to the Salt Creek Interceptor. Currently, the Proposed Project involves a total of only 1,140 EDUs (based on City of Chula Vista criteria). Appendix B provides the calculations for the total number of EDUs for the Proposed Project based on City of Chula Vista criteria. In addition to this decrease in projected EDUs from the Proposed Project, flows from the Proposed Project are not expected to impact the capacity of the Salt Creek Interceptor because the capacity of the downstream portions of the Salt Creek Interceptor was increased during final design, and the development projections from upstream areas have decreased. In particular, the Salt Creek Interceptor was sized with capacity for Otay Ranch Villages 13, 14, and 15, and Planning Areas 16 and 19. Since preparation of the Salt Creek Basin Study, Village 15 has been purchased for conservation purposes and will no longer be developed. In addition, the City of Chula Vista has updated their sewage generation factors which has had the effect of reducing projected flows. A more detailed discussion of Salt Creek Interceptor Capacity is provided under the cumulative impacts section of this chapter.

The Proposed Project will be required to pay an impact fee for the use of the Salt Creek Interceptor as discussed below.

**Salt Creek Basin Impact Fees.** The November 1994 Salt Creek Basin Study was prepared by Wilson Engineering to establish a fee to fund future improvements to the Salt Creek Interceptor System. This fee is required to be paid by all future developments within

the Salt Creek Drainage Basin to fund improvements required to serve ultimate development within the drainage basin. The Salt Creek Interceptor Development Impact Fee (DIF) was updated in 2004 and still included the County properties (e.g. Village 14 and Planning Areas 16/19) in the service area and fee calculation. The 2004 DIF update established the Salt Creek Interceptor Fee to be \$1,330 per EDU. The City of Chula Vista adopted a new Salt Creek Interceptor DIF in July 2015 based on the June 2015 Development Impact Fee Study prepared by Bartle Wells Associates. This study removed County properties, including the Proposed Project, from the study area and proposed that the DIF remain at \$1,330 per EDU. The June 2016 sewage transportation agreement between the City of Chula Vista and SDCSD added County properties back into the Salt Creek Interceptor and requires County properties that will convey flow to the Salt Creek Interceptor to pay the Salt Creek Interceptor DIF that is in effect at the time of building permit issuance. The June 2016 agreement confirms this fee to be currently set at \$1,330 per EDU, which is subject to change by the City of Chula Vista.

### **Salt Creek Interceptor – Cumulative Impacts**

The June 2016 sewage transportation agreement between the City of Chula Vista and SDCSD includes a mapped service area of County properties that shall be allowed to be served by the Salt Creek Interceptor under the agreement. The Village 14 and Planning Areas 16/19 properties are included within the mapped service area. Furthermore, an updated hydraulic analysis for the Salt Creek Interceptor was prepared concurrently with the agreement preparation and the following stipulations were incorporated into the agreement:

- Actual sewage flows from County properties shall be measured prior to entering the interceptor sewer.
- County properties may discharge up to 870,000 gallons per day of wastewater to the Salt Creek Interceptor without any need for improvements to the interceptor.
- For flows from County properties that exceed 870,000 gpd, but are less than 1,000,000 gpd, the agreement identifies a 407 foot section of the interceptor that will need to be improved by SDCSD.

- For flows from County properties in excess of 1,000,000 gpd, an amendment to the agreement will be required.

In establishing the flow limitation of 870,000 gpd, the County projected a total flow of 372,873 gpd from Village 14 and Planning Areas 16/19. The current projection for the Proposed Project is 276,186 gpd which is well within the projected amount. Based on the information presented above, sewer service can be provided to Village 14 and Planning Areas 16/19 by constructing offsite sewer facilities to convey flows to the Salt Creek Interceptor and by paying development impact fees for the interceptor. No offsite improvements to the Salt Creek Interceptor are required to provide service to the Proposed Project.

## **APPENDIX A**

### **CITY OF SAN DIEGO PEAKING FACTOR EQUATION**



**CITY OF SAN DIEGO**

**METROPOLITAN WASTEWATER DEPARTMENT**

**PEAKING FACTOR FOR SEWER FLOWS (DRY WEATHER)**

**Ratio of Peak to Average Flow is based on the following formula:**

$$\text{Peak Factor} = 6.2945 \times (\text{population})^{-0.1842}$$

## **APPENDIX B**

### **TOTAL EDU CALCULATION BASED ON CITY OF CHULA VISTA**

**TABLE C**  
**OTAY RANCH VILLAGE 14 AND PA 16/19**  
**PROJECTED SEWAGE FLOWS**  
**BASED ON CITY OF CHULA VISTA CRITERIA**

<b>Land Use Designation</b>	<b>Land Use Description</b>	<b>Quantity</b>	<b>Sewage Generation Factor</b>	<b>Total Average Sewage Flow, GPD</b>	<b>EDU's</b>
R-1 to R-3, R-5 to R-16	SF Residential	906 units	230 gpd/unit	208,380	906
R-4	Residential (>8 DU/AC)	116 units	182 gpd/unit	21,112	91.8
MU-C	Commercial	1.7 ac	1,401 gpd/ac	2,382	10.4
P	Park	24.7 ac	410 gpd/ac	10,127	44.0
FS	Public Safety	2.3 ac	1313 gpd/ac	3,020	13.1
S	School	9.7 ac/97 units <sup>1</sup>	182 gpd/unit	17,654	76.8
<b>Total</b>				<b>262,675</b>	<b>1,142</b>

<sup>1</sup> Units allocated to school site at 10 Du/ac per Otay Ranch GDP/SRP policies. Sewer flows were projected based on the residential unit allocation to be conservative.

**APPENDIX C**

**SEWAGE TRANSPORTATION AGREEMENT  
FOR THE  
SALT CREEK SEWER INTERCEPTOR**

**THIS SEWAGE TRANSPORTATION AGREEMENT FOR THE SALT CREEK SEWER INTERCEPTOR** is made and entered into by and between the San Diego County Sanitation District, an independent sewer district formed and operating under the County Sanitation District Act, Health & Safety Code section 4700, *et seq.* ("District"), the County of San Diego, a political subdivision of the State of California ("County"), and the City of Chula Vista, a municipal corporation ("City").

### RECITALS

- A. City owns, operates and maintains the Salt Creek Sewer Interceptor System ("City System") for the purpose of collecting and transporting sewage from properties located in the Otay Basin to the City of San Diego's Metropolitan Sewerage System (hereinafter "Metro System") for treatment and disposal. Within the City System is a primary trunk sewer known as the Salt Creek Interceptor (hereinafter referred to as the "Interceptor Sewer") which is an approximate 13.25 mile segment located within the Otay Basin that runs from the intersection of Proctor Valley Road and Hunte Parkway in the City of Chula Vista, to a point of connection with the Metro System located near the junction of Main Street and Interstate 5.
- B. In October 1993, the City and County jointly adopted the Otay Ranch General Development Plan/Subregional Plan ("GDP/SRP") which provided for the development of Otay Ranch as a series of village and planning areas. Otay Ranch Villages 13 and 14, and Planning Areas 16, 17, and 19 ("Villages") as identified in the GDP/SRP are located in portions of the unincorporated County to the east of City boundaries.
- C. The District is empowered by Health and Safety Code Section 4843 to enter into this agreement with the City to provide for the transportation of sewage from the Villages to the Metro System using the City System. Subsequent to execution of this agreement, the District will seek to annex (via LAFCO) the Villages into the District's territory.
- D. The City and District are parties to the "Regional Wastewater Disposal Agreement between the City of San Diego and the Participating Agencies in the Metropolitan Sewerage System" filed on May 18, 1998, as Document No. 00-18517 with the City Clerk of the City of San Diego (hereinafter "Regional Wastewater Disposal Agreement"). In accordance with the Regional Wastewater Disposal Agreement, the City and District have the right to discharge wastewater up to established limits into the Metro System, hereinafter referred to as "Metro Capacity Rights". The City and District are agreed in that: 1) all sewage originating in the City or from territory within the City's sphere of influence which is ultimately discharged into the Metro System through the City System shall be charged against the City's Metro Capacity Rights and that 2) all sewage discharged into the Interceptor Sewer from territory served by the District shall be charged against District's Metro Capacity Rights.
- E. The primary purposes of this agreement are to: 1) establish the rights, privileges and duties of the parties concerning the use of the Salt Creek Interceptor by the District; 2) allow for the construction and maintenance of connections to the Interceptor Sewer by District; 3) specify the area within the District to be served by the Interceptor Sewer; 4)

set standards regarding waste characteristics; 5) establish lease, fees and charges and the methods for determining them; and 6) establish discharge capacity limitations consistent with the Regional Wastewater Disposal Agreement for each agency.

#### AGREEMENT

NOW, THEREFORE, in consideration of the mutual obligations of the parties as herein expressed, City, County and District agree as follows:

#### ARTICLE 1 - DEFINITIONS

The singular of each defined term includes the plural. For the purposes of this agreement, the following definitions apply:

Authorized Agency means a municipality, district, or agency which has been authorized by City to discharge sewage into the City Sewerage System pursuant to sewage transportation agreement(s) with the City.

City Sewerage System means City's wastewater collection system, which consists of pipelines and pump stations that collect wastewater within the Otay Basin and convey it to the Metropolitan Sewerage System for treatment and disposal via the City's Interceptor Sewer.

City Sewerage System Facility means each element of the City Sewerage System used or useful for the transportation of sewage, including but not limited to: transmission lines; force mains; trunk sewers; interceptors; and pump stations.

Available Capacity means the transportation capacity in the City Sewerage System made available to District to serve the District Tributary in accordance with Article 3 of this agreement.

Best Management Practices means an engineered structure, management activity, or a combination thereof, that eliminates or reduces an adverse environmental effect of a pollutant.

Capital Improvement Project (herein referred to as "CIP") means those items and activities required by sound engineering and best management practices, including but not limited to acquisition, planning, design, financing, and construction, for any one or more of the following purposes: 1) to alter, change or modify the hydraulic capacity of any part or whole of the City Sewerage System; 2) to improve the function and performance of any part or whole of any portion of the City Sewerage System; 3) to add new facilities to the City Sewerage System for the purpose of altering, changing, or modifying the hydraulic capacity, or improving the function and performance of the system; or 4) to perform a major repair or major replacement of any existing City Sewerage System facilities.

Capital Improvement Project Cost means costs associated with a Capital Improvement Project.

Capacity Limitations means the amount of sewage allowed under this agreement to discharge into those portions of the City Sewerage System, up to the limits set forth in Article 3 of this

agreement. These limitations are separate and distinct from Metro Capacity Rights as referenced in the Regional Wastewater Disposal Agreement.

County means the County of San Diego, a political subdivision of the State of California.

Design Capacity means the maximum flow which can be conveyed through a pipe segment when the ratio of depth of the flow to the diameter of the pipe segment ( $d/D$ ) equals 75% for pipe segment 18 inches or greater, or 50 % for pipe segment 15 inches or smaller. In the case of a pump station, design capacity means the maximum flow that can be pumped using the main pumps, excluding the backup pumping capacity.

District's Tributary means District areas where wastewater flows are conveyed to the City Sewerage System, and measured using either flow meters or house-count areas. The authorized District's Tributary further described in Article 2 and Exhibit A is conveyed to the Metropolitan Sewerage System for treatment and disposal via the City's Interceptor Sewer.

Fiscal Year means the period from July 1 through June 30.

Flow means the amount of wastewater produced by customers, and including inflow and infiltration, which is discharged into the City Sewerage System by District. Flow may be expressed in million gallons per day (MGD).

Infiltration means water other than wastewater produced by customers that enters a sewerage system (including sewer service connections) from the ground through such means as defective pipes, pipe joints, connections or manhole structures (excluding the manhole cover). Infiltration does not include, and is distinguished from, Inflow.

Inflow means water other than wastewater produced by customers that enters a sewerage system (including sewer service connections) from sources such as roof leaders, cellar drains, yard drains, area drains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, Infiltration.

Interceptor Sewer means that portion of the City Sewage System, commonly referred to as the Salt Creek Interceptor, that consists of an approximate 13.25 mile segment located within the Otay Basin that runs from the intersection of Proctor Valley Road and Hunte Parkway in the City of Chula Vista, to a point of connection with the Metro System located near the junction of Main Street and Interstate 5.

LAFCO means the San Diego Local Agency Formation Commission.

Metropolitan Sewerage System (previously defined as the Metro System) means those City of San Diego facilities and contract rights to facilities which are described in the Regional Wastewater Disposal Agreement, as may be amended.

Operation and Maintenance (herein referred to as "O&M") means those items and activities required by sound engineering and best management practices to maintain the hydraulic capacity, function, and performance of the City Sewerage System or Metro System.

Operation and Maintenance Costs means the costs of operation and maintenance including, but not limited to, annual costs associated with administration, operation, maintenance, replacement (non-CIP), annual premiums, claims payments and claims administration, and overhead.

Otay Ranch Village Sewer System (sometimes referred to herein as the ORVSS) means the District's wastewater collection system to be built and owned by District for the purposes of collecting wastewater within the Villages, as more particularly detailed in Exhibit A, that conveys or may convey sewage to the Metropolitan Sewerage System for treatment and disposal via the City's Interceptor Sewer.

Parties means City, District, and County.

Regional Wastewater Disposal Agreement means the "Regional Wastewater Disposal Agreement between San Diego and the Participating Agencies in the Metropolitan Sewerage System," Document No. OO-18417, filed May 18, 1998, with the Clerk for the City of San Diego as may be amended.

Sewage means wastewater and its commonly constituent substances.

Sewage Transportation Service means the transportation of sewage from the point of discharge into the City Sewerage System to the Metropolitan Sewerage System.

Transportation Charge means the amount paid to the City for transportation of District's flow in the City Sewerage System. This charge includes Operation and Maintenance costs but does not include Capital Improvement Project costs.

Unit Transportation Rate means the amount per unit distance (mile) of length of gravity sewer charged for sewage transportation service.

Villages means the unincorporated areas including Otay Ranch Villages 13 and 14, and Planning Areas 16, 17, and 19 as shown on Exhibit A hereto.

## ARTICLE 2 - OWNERSHIP AND OPERATION OF THE CITY SEWERAGE SYSTEM

- 2.1 Right to Use. This agreement provides District with a contractual right to use the Interceptor Sewer included within the City Sewerage System. All decisions with respect to the planning, design, construction, operation and maintenance of the City Sewerage System shall rest with the City. If District's contractual right to use the Interceptor Sewer is adversely impacted by the planning, design, construction, operation and maintenance of any part of City Sewerage System, District shall have the right to review and comment on these issues prior to any modifications to the subject portions of the City Sewerage System.



However, District shall only have a contractual right to use the Interceptor Sewer as set forth in this agreement.

2.1.1 **Mapped Service Area.** The District Tributary area mapped on Exhibit A shall be the only District area served by connections to the Interceptor Sewer. In no event shall District allow areas not depicted on Exhibit A to be served using the Interceptor Sewer. Subject to the limitations hereinafter set forth, the District may request expansion of the area served. Expansion of the area served (District's Tributary) may be accommodated by the City as long as there is sufficient capacity and the additional flow will not impair the usefulness, as reasonably determined by the City, of the Interceptor Sewer. Expansion of the District's Tributary would require amendment of this agreement, as well as production of amended Exhibits.

a. **Area to be Served.** Only those areas within the District's Tributary as shown on Exhibit A, as amended from time to time, and located within the District or annexed to the District by LAFCO action, shall be eligible to be served by City's Interceptor Sewer. Notwithstanding the foregoing, the City may temporarily serve areas outside District boundaries but within the District's sphere of influence or for other purposes within the scope of California Government Code section 56133 as the same may be amended from time to time. Temporary service shall be subject to the prior written approval of the City's Engineer, which approval shall specify the area and duration of the temporary service.

2.1.2 **Change in Ownership.** Subject to the terms of this agreement, and in conformance with all applicable laws, City may transfer ownership of all or part of the City Sewerage System at any time. City shall not transfer or agree to transfer any part of the Interceptor Sewer transporting sewage from the District Tributary without reserving District's rights granted by this agreement. In the event of a transfer, City's successor(s) in interest shall be bound by the terms of this agreement.

2.1.3 **Assignment of Rights.** Subject to the terms of this agreement, District may transfer or assign its rights and obligations under this agreement. Any such transfer must first, however, be approved in writing by City's Engineer. District may not transfer its rights if City determines, after consultation with District, that the proposed transfer will adversely impact City's ability to operate the City Sewerage System or violate or potentially violate the Regional Wastewater Disposal Agreement.

2.2 **Duties of City.** City shall operate and maintain the Interceptor Sewer in an efficient and economical manner, and maintain it in good repair and working order, all in accordance with recognized sound engineering and best management practices. City shall comply with all applicable laws, rules and regulations.

2.3 **Duties of District.** District shall maintain connections and discharge sewer flows into the Interceptor Sewer in accordance with this agreement, the Regional Wastewater Disposal Agreement, City ordinances, resolutions, rules and regulations, and all applicable State and

federal laws, rules, and regulations. Continued District connection and use of the Interceptor Sewer shall be subject to the following:

- 2.3.1 Connections. District, at its sole expense, shall construct, install, maintain, repair, replace and reconstruct all connections and appurtenances to the Interceptor Sewer installed or constructed by District under the terms of this agreement. The location, installation, construction, repair (except emergency repairs, which following the resolution of the emergency, shall be made to conform to City standards), replacement and reconstruction of each and every such connection and appurtenance shall be in accordance with City design standards, Standard Specifications and San Diego County Regional Standard Drawings. City shall not unreasonably condition or delay any necessary permits, access, and easements for the construction, maintenance, and operation of improvements within the City necessary for conveyance of sewer flows from the Villages to connections to the City Sewerage System.
- 2.3.2 Traps and Dissipaters. After consultation with City, District may be required to install "filters" such as screens, debris traps or energy dissipaters at or near sites connecting to the Interceptor Sewer. When required, City shall request the installation in writing and allow a minimum of 120 days for installation after the initial request is made. Installation of filters including planning, design, construction, operation and maintenance will be the sole responsibility of the District.
- 2.3.3 Odor Control. If City determines that flow from District is causing unreasonably high concentrations of hydrogen sulfide gas in the Interceptor Sewer, or is a source of unreasonably noxious odors, District shall take reasonable steps within the District sewer system to eliminate such concerns, such as pre-treating the flow with chemicals to reduce the formation of hydrogen sulfide.
- 2.3.4 Pump Station Operation. The District shall design and operate pump stations within the ORVSS so as not to impact the City sewerage system from excessive pumped flow rates or turbulent hydraulic conditions. To the extent that City determines that the flow rates are excessive or create turbulent hydraulic conditions, the District shall make such changes necessary to reduce the impact to a level acceptable to the City.
- 2.3.5 Limitations on Type and Condition of Sewage. District shall not discharge or allow to be discharged, any sewage or wastes into the Interceptor Sewer which do not meet the standards established by City ordinances, resolutions, rules and regulations and the Regional Wastewater Disposal Agreement. District shall also comply with all applicable statutes, rules and regulations of all agencies of the United States of America, including the Environmental Protection Agency, the State of California, any agencies of the State of California, and the City of San Diego having jurisdiction over the collection, transmission, treatment and disposal of sewage and other wastes in the Interceptor Sewer. District shall regulate and prohibit the discharge into any sewer line connected to and served by the Interceptor Sewer of sewage and wastes which do not meet the quality and standards established by City.

- a. Excessive Inflow or Infiltration. District shall not allow, to the extent practicable, excessive inflow and infiltration to be discharged into the Interceptor Sewer from any District sewer system or facilities. For purposes of this Section, "excessive" means any amount that causes District to exceed the capacity limitations set forth in Article 3.
  - b. Compliance with Laws. District shall not allow, to the extent practicable, the discharge of any waste, pollutant, inflow, or infiltration into the Interceptor Sewer that is prohibited by ordinances, resolutions, rules, or regulations of the United States of America, including the Environmental Protection Agency, the State of California, City, City of San Diego, or other local agency having jurisdiction over the collection, transportation, treatment and disposal of sewage and other wastes in the Interceptor Sewer. District shall not discharge sewage into the Interceptor Sewer in a manner that would violate the Regional Wastewater Disposal Agreement.
  - c. Enforcement Actions. If a regulatory agency with appropriate jurisdiction imposes any penalty or takes other enforcement action related to the transportation of sewage or other matter in or from the Interceptor Sewer, City shall determine, in active consultation with impacted parties, whether City, District, or any other authorized agency caused or contributed to such penalty or enforcement action. Based on this determination, City shall allocate the penalty or other relief, including the cost of defense, to the party or parties responsible. Each responsible party, whether City, District, or another authorized agency, shall pay its share of the penalty or other relief, and any costs of defense as reasonably determined by City in active consultation with impacted parties. If City cannot make an allocation based on responsibility, the cost of the penalty or other relief shall be shared by City, District, and any other authorized agency involved based proportionately on their respective average daily flow into the Interceptor Sewer. In no event shall City allocate costs attributable to City or another authorized agency to District.
- 2.4 Funding Obligations. Nothing in this Section or in this agreement shall obligate City to make any payment for the acquisition, construction, maintenance or operation of the City Sewerage System, and in particular the Interceptor Sewer, from monies derived from taxes or from any income and revenue of City other than monies in, or sewer revenues which go into, the operating fund for the City Sewerage System, and from construction funds derived from the sale of sewer revenue bonds or other sources of sewer funding for the City Sewerage System as are duly authorized. Nothing in this Section, however, or in this agreement shall prevent City, in its discretion, from using tax revenues or any other available revenues or funds of City for any purpose for which City is empowered to expend monies under this agreement.
- 2.5 Financial Statements. City shall keep appropriate records and accounts of all costs and expenses relating to the collection and conveyance of sewage and the acquisition, planning,

design, construction, administration, monitoring, and operation and maintenance of the Interceptor Sewer.

2.5.1 Right to Audit. Upon written request, said records and accounts shall be subject to reasonable inspection by any duly authorized representative of District, at District's sole expense. District may audit these records for a three fiscal year period previous to its request, at its sole expense.

2.5.2 CAFR. City shall make its Comprehensive Annual Financial Report as it relates to the Interceptor Sewer available to District.

### ARTICLE 3 - CAPACITY LIMITATIONS

3.1 District's Tributary Limit. The District's Tributary, subject to annexation pursuant to section 2.1.1, consists of the Villages. Pursuant to terms of this agreement District may discharge up to 870,000 gallons per day of wastewater generated within the Villages ("District's Tributary Limit"). The basis of this capacity limitation is an official study ("Study") conducted by the District and in a manner satisfactory to the City, which verified that adequate capacity is available in the City Sewerage System to convey up to 870,000 gallons per day of wastewater generated within the Villages. District shall not allow flows into the Interceptor Sewer that exceed the District's Tributary Limit.

3.2 Increase in District's Tributary Limit. The Study determined that discharges from the Villages of between 870,000 gallons per day and 1,000,000 gallons per day may result in impacts to one sewer reach of the City's Sewerage System totaling 407 feet in length (the "Reach"), depicted in Exhibit B. Provided that the District, at its sole cost and expense and at a time reasonably determined by the City, improves or causes the improvement of the Reach in a manner that supplies the needed capacity, the City shall grant the District the right to discharge additional flows into the Interceptor Sewer in excess of 870,000 and up to 1,000,000 gallons per day ("Increased Tributary Limit"). At no time, however, shall the District allow the flows into the City Sewerage System to exceed the Increased Tributary Limit.

3.3 Metered Flow. District's Tributary flows will be metered prior to entering the Interceptor Sewer. Said meters and installation shall be of the American Digital System (ADS) type and installed at such locations and in a manner approved by City's Engineer.

3.4 Requests for Additional Discharge Capacity In Excess of 1,000,000 Gallons Per Day. If at any time, average annual flows from District's Tributary exceed the cumulative capacity limit in Section 3.1 or as increased by Section 3.2, above, District shall request an amendment to this agreement. The decision of whether to allocate additional discharge capacity to District shall be at the sole discretion of City. District agrees to submit a written request to City to obtain the additional capacity needed in accordance with the procedures set forth in this agreement. In the event discharge capacity is requested for areas outside the District's Tributary as identified on Exhibit A to this agreement, District shall seek to amend this Sewage Transportation Agreement and associated exhibits.

- 3.5 Transfers of Discharge Capacity. Without advance notification and written approval from the City's Engineer, which approval shall not be unreasonably withheld, District shall not buy, sell or exchange all or part of its discharge capacity in the City Sewerage System. No sewerage capacity may be transferred if City determines, after consultation with District, that said transfer will adversely impact City's ability to operate the City Sewerage System, Interceptor Sewer or comply with the Regional Wastewater Disposal Agreement. As a ministerial matter, City's Engineer shall adjust District's cost responsibilities for O&M per Article 6 and make such other changes in the administration of this agreement as are necessary to reflect the transfer.

#### ARTICLE 4 - MONITORING

- 4.1 Flow Monitoring Devices. If at any time during the term of this agreement it is deemed necessary or desirable by City to measure all or a portion of the flow from District's Tributary, the City shall make written demand on District that District install any and all such meters as City deems necessary or desirable. Within 365 days after receipt of such demand, District shall at its sole expense, install such meters at the locations specified by City. Said meters and installation shall respectively be of the American Digital System (ADS) type and installed at such locations and in a manner approved by City's Engineer. At its own discretion and upon written approval by the City's Engineer, District may install meters in lines maintained by the City or the District to measure all or a portion of the sewage discharged into the Interceptor Sewer from District connections to the Interceptor Sewer.
- 4.2 Equipment Maintenance and Reporting. District shall operate, maintain, manage and control the flow monitoring device(s) installed to monitor its flows into the Interceptor Sewer in an efficient and economical manner and preserve them in good repair and working order, all in accordance with recognized and sound engineering practices. District shall ensure that flow data information obtained from such meters is available to the City through direct computerized flow monitoring such as the Intelli-Serve Website for ADS meters. From time to time the City may, at its own discretion, conduct capacity measurements to determine actual peak and average daily flows through direct computerized flow monitoring. The results of these measurements may be used to verify, or to cause District or District's agents to restore, the accuracy of the meters installed by District.

#### ARTICLE 5 - EXCEEDING CAPACITY

- 5.1 Limitations on Capacity. During the term of this agreement, District shall have the right to discharge sewage into the Interceptor Sewer in an amount not to exceed its contract capacity set forth in Section 3.1, or as increased in accordance with this agreement. City is not obligated to receive from District, nor is District privileged to discharge into the Interceptor Sewer, any amounts in excess of District's contract capacity permitted under this agreement.
- 5.2 Good-Faith Contract Capacity Discussions. The parties recognize that appropriate capacity and long term planning are essential for the proper provision of sewage transportation service. The parties further recognize that it is very difficult to forecast and measure the

resulting damage to City and the City Sewerage System if District exceeds its contract capacity. Therefore, if City notifies District that it has exceeded its contract capacity (measured in gallons per day on average over a 24-hour period), at any time during five or more days (from midnight to midnight) in any consecutive 90-day period, District shall develop and submit a plan of action and an implementation schedule to City for its approval and acceptance. At a minimum, the plan shall describe how District proposes to stay within its contract capacity or how District proposes to increase its contract capacity in the Interceptor Sewer. District's proposals may include, but are not limited to, increasing available capacity through participation in City Sewerage System capital improvement projects, purchasing or transferring capacity from City or an authorized agency, taking other measures such as the replacement of District system components experiencing infiltration and inflow and/or construction of peak flow retention structures or re-use facilities to reduce District's flow into the Interceptor Sewer.

**5.2.1 City Review.** In the event that District fails to submit the aforementioned plan of action and implementation schedule within six (6) months of the date District is notified by City, or if City reasonably determines that the submitted plan and schedule are insufficient or untimely to adequately address the matter, City shall independently develop a plan to address increase capacity on behalf of the District. City shall provide a copy of the plan, which shall include: (1) the type and location of any capital improvement projects necessary; (2) the projected costs of such capital improvement projects; and (3) the allocation of such costs to District ("Notice of Determination").

- a. District shall have six (6) months from the date of the Notice of Determination to either: (1) comment on or challenge all or part of the Notice of Determination; (2) agree to the Notice of Determination; or (3) commit, in writing, to obtain new sewage transportation services outside of the City Sewerage System. If District objects to City's determination, District shall have the burden to commence and diligently pursue the formal dispute resolution procedures of Article 12 of this agreement. If District fails to initiate dispute resolution within ninety (90) days after the expiration of the time to respond to the Notice of Determination, City's determination shall become final and binding on District, and District agrees to pay the capital improvement project costs and transportation charge, if any, set forth therein.
- b. If District and City agree on the capital improvement projects necessary to support increased contract capacity, City and District shall enter into an agreement specifying the terms and conditions pursuant to which the capital improvement projects shall be undertaken. The agreement shall provide that District shall reimburse City for its proportionate share of any capital improvement project costs accruing to District to support increased contract capacity.

**5.3 No Limitation of Municipal Powers.** City has sole discretion to determine how to operate the City Sewerage System in a safe, efficient and environmentally sound manner to avoid

any risk to the health, safety and welfare of the public. Therefore, nothing in this agreement shall be construed as precluding or limiting City from taking any action reasonably necessary to prevent flow from District that endangers the health, safety, or welfare of the residents of the City.

5.4 Diversion of Flow. Nothing in this Agreement shall preclude District from diverting all or part of its flow from the City Sewerage System. However, prior to such diversion, District shall notify City in writing at least six (6) months in advance and enter into an agreement with City that, at a minimum, will require District to pay its proportionate share of outstanding capital improvement project costs, if payment of such outstanding costs upon diversion of flow is not already addressed by separate agreement. District will also be responsible for all transportation charges owed by District up to the time of diversion.

5.4.1 No Refunds. In no event shall District's diversion of all or part of its flow from the City Sewerage System entitle District to any refund of previously remitted payments for capital improvement project costs, or forgiveness of amounts owed, if any, to City for existing or increased contract capacity. District shall, however, retain such purchased contract capacity and may transfer such capacity rights to another authorized agency, subject to City's approval. District's contract capacity may be reduced or eliminated by future capital improvement projects as follows, unless District reserves capacity in accordance with Section 5.4.2:

- a. If a capital improvement project replaces a facility in which District has contract capacity, District's contract capacity is extinguished, unless District pays its fair share of capital improvement project costs.
- b. If a capital improvement project rehabilitates a facility in which District has contract capacity, District's contract capacity is reduced in proportion to the extent District fails to pay for its proportionate share of the use of the facility.

5.4.2 Reserving Future Capacity. If District diverts all or part of its flow from the City Sewerage System, District may retain its purchased contract capacity by paying its proportionate share of future capital improvement projects in accordance with Article 8. City may decline to reserve contract capacity only if City reasonably determines that reserving contract capacity will have a material adverse effect on the operation, maintenance, or useful life of the facility or the City Sewerage System.

5.4.3 Re-Introduction of Flow. If District intends to re-introduce flow previously diverted pursuant to Section 5.4, other than on an emergency basis, District shall notify City in writing at least six (6) months in advance of re-introducing the flow into the City Sewerage System.

## ARTICLE 6 - TRANSPORTATION CHARGES

6.1 Operation and Maintenance. The Interceptor Sewer shall be maintained by City in good repair and working order in accordance with sound engineering practices. Keeping the Interceptor Sewer in good working order requires routine cleaning and inspection; minor

repairs, replacements and reconstruction; as well as unanticipated minor emergency work. These kinds of City activities are considered O&M, and the cost of these activities, as well as associated administrative and overhead costs shall be included in the Transportation Charge.

Capital improvement charges, as described in Article 8, are separate and distinct from transportation charges.

- 6.2 Transportation Charges. Transportation charges are used to allocate a portion of the O&M for the Interceptor Sewer to District. The transportation charge shall be equal to the unit transportation rate charged by the City of San Diego to those signatories of the Regional Wastewater Disposal Agreement. At such times that the City of San Diego adjusts the unit transportation rate, the rate under this agreement shall be adjusted automatically, with no amendment to this agreement or action of the parties hereto, such that it remains equal to that rate charged by the City of San Diego.

The transportation charge effective July 1, 2016 through June 30, 2017, imposed by the City of San Diego on participating agencies is \$7.09 per mg-mile. This rate is adjusted each fiscal year by the City of San Diego. If the City of San Diego fails to increase the rate, City may increase the rate as reasonably necessary to ensure full cost recovery for the operation of the Interceptor Sewer.

- 6.3 Billing. City shall bill District on an annual basis for transportation charges. Billing will be based on cumulative sewage flows from District Tributary as measured by ADS flow meter readings for the prior fiscal year - July 1 through June 30. Billing will also be based on City's determination of total length of City sewer utilized by the District and calculate annual transportation charges based on mg-mile of City sewer utilized by the District. Payment shall be made by District to City within thirty (30) days of receipt of the billing and shall be considered delinquent fifteen (15) days thereafter. Late payments shall accrue interest at a rate of ten (10) percent per annum.

- 6.5 Payment Disputes. No payment shall be withheld by District because of a dispute as to its amount. Disputed payment shall be made with a notation as to the portion in dispute. Payment disputes shall be resolved pursuant to the dispute resolution procedure set forth in this agreement. Any amount determined to have been improperly allocated to District resulting in an overpayment shall be adjusted by City as a credit to the next invoice following such determination. In the event that the improper allocation to District resulted in an underpayment, such amount shall be adjusted by City as a debit to the next invoice following such determination.

- 6.6 Metro Sewer Service Fee. District shall be responsible for paying Metro's Sewer Service Fee directly to Metro.

6.6.1 In order to determine the amount of the Metro Sewer Service Fee, the District shall install or have installed, at its sole cost and expense, a flow meter or meters and a sampling station at the point of connection with the City Sewerage System to assist in



the correct distribution of the sewer service fees by Metro. If Metro does not assume responsibility for the maintenance and operation of the meter/testing station, costs associated with the maintenance and operation of said stations shall be the responsibility of the District. Flow monitoring shall be continuous. Flow strength testing shall be performed in accordance with City of San Diego's testing intervals.

#### ARTICLE 7 — FEES ASSOCIATED WITH DEVELOPMENT

- 7.1 Payment Prior to Permit Issuance. As a condition of permit issuance, County shall require developer to pay sewer related City Development Impact Fees and other payments, whether required by contract, ordinance or law, associated with development within the Villages ("Fees"). County shall not issue any building permits for development within the Villages until it receives written confirmation, which confirmation shall not be unreasonably withheld, from the City that City has received all Fees, including, but not limited to the following:

- 7.1.1 Salt Creek DIF. City Ordinance No. 2617 establishes impact fees to be paid by developers that connect to the Interceptor Sewer. Development Impact Fees charged and remitted shall be those in effect at the time of building permit issuance. Current DIF (2015) fees by land use category are as follows:

SALT CREEK INTERCEPTOR IMPACT FEES	
Land Use	Fees
Single Family Residential	\$1,330/unit
Multi-Family Residential	\$997.50/unit
Commercial (including restaurant)	\$13,300/acre
Community Purpose/Fire Station	\$13,300/acre
Schools	\$5,320/acre
Park	\$2,660/acre

- a. DIF Update. City agrees to update the DIF in a timely manner to include Village(s) that are proposed for development, but in no event later than 6 months after approval of a tentative map for the Village(s). County shall give City notice of the approval of a tentative map. Costs incurred by the City in updating the DIF shall be paid by the City and incorporated into the new DIF fee.

7.1.2 Capacity Fee. City requires developers to pay a Sewer Capacity Charge for development. The amount of the Capacity Fee due to the City from developers shall be equal to the difference between the Sewer Capacity Charge identified in City's MASTER FEE SCHEDULE – FEE Bullet Chapter 12-100, Sewer Fees Construction & Development, as it is amended from time to time, and the Treatment Component of Chula Vista Capacity Fee. Fees shall be those in effect at the time the building permit is issued.

7.1.3 Notice. In the event that City proposes any changes in fees, other than automatic fee increases and adjustments, City shall notice all related Council hearings and actions in accordance with law and regulation.

#### ARTICLE 8 - CAPITAL IMPROVEMENT PROJECTS

- 8.1 Capital Improvement Projects. Capital Improvement Projects as defined in this agreement, include major repairs, major replacements or reconstruction, and other non-routine activities to improve or modify hydraulic performance of the Interceptor Sewer. Activities associated with capital improvement projects are separate and distinct from those associated with the O&M activities of Article 6. City and District are obligated to pay for capital improvement projects for the Interceptor Sewer that are needed to maintain existing capacity requirements or to provide new capacity under the terms below; provided, however, that the decision whether or not to construct a capital improvement project shall be at the sole discretion of City.
- 8.2 Capital Improvement Charges to Maintain Existing Capacity. City will charge District for its proportionate share of CIP cost based on the District's percentage of flow in the particular "reach" of City sewer pipe being improved. The proportionate flow percentage of each agency utilizing City sewer segments shall be calculated by the City. Upon request by the District, the City shall inform the District of the methods used to calculate District's proportionate flow percentage.
- 8.3 Capital Improvement Charges for Increased Capacity. The costs associated with any improvements for additional capacity will only be charged to that agency requiring the additional capacity.
- 8.4 Annual Adjustments to Flow Percentages. The City shall annually adjust and recalculate as appropriate, the proportionate flow percentage of each agency utilizing City sewer segments. Future CIP charges applied to the District shall be based on the annually adjusted/updated flow percentages.
- 8.5 Billing. City shall bill District on an annual basis for capital improvement charges. Payment shall be made by District to City within thirty (30) days of receipt of the billing and shall be considered delinquent fifteen (15) days thereafter. Late payments shall accrue interest at a rate of ten (10) percent per annum.

#### ARTICLE 9 — CHARGE AGAINST CAPACITY RIGHTS IN METRO SYSTEM

9.1 Allocation of Capacity. All sewage discharged into the Interceptor Sewer through District's connections, with the exception of any discharges conveyed from City customers by District pursuant to transportation agreements with City, and thereafter discharged into the Metro System, and all Infiltration and Inflow allocable to District, shall be charged against District's capacity rights in and to the Metro System as such rights have been determined pursuant to the Regional Wastewater Disposal Agreement.

9.1.1 Meters. The District shall arrange with the City of San Diego for the installation of meters at the District connections to the Interceptor Sewer to monitor and measure the District Flow that will be ultimately conveyed to the Metro System and charged against District's capacity rights therein.

#### ARTICLE 10 – DURATION OF AGREEMENT

10.1 Effective Date. This agreement shall become effective immediately upon execution by City and District.

10.2 Term of Agreement. Subject to the rights and obligations set forth in Section 11.1 below, this agreement shall commence on July 1, 2016 and expire fifteen (15) years thereafter on June 30, 2031 or upon the earlier expiration or termination of the Regional Wastewater Disposal Agreement. Any outstanding obligation of District to pay its proportionate share of capital improvement project costs and such other costs addressed by Article 8 shall survive termination of this agreement.

10.3 Extension of Agreement. Subject to City's determination that there is sufficient capacity in the Interceptor Sewer and that extension will not impair the usefulness of the Interceptor Sewer and upon one (1) year's written notice from District, this agreement is subject to extension as a new lease of facilities for the remaining term of the Regional Wastewater Disposal Agreement in 15-year intervals or such shorter term as may be necessary for the last extension to remain within the termination date of the Regional Wastewater Disposal Agreement.

10.4 Contract Termination. If in the future, District is able to obtain alternate sewage transportation services, District may divert some or all of its flow from the Interceptor Sewer pursuant to this agreement. This agreement shall terminate if for any reason District's committed capacity in the Interceptor Sewer is entirely extinguished; however, in the event that District Terminates this agreement, District shall still be responsible for the costs of any Capital Improvement Project or portion thereof constructed based on District's need for capacity.

10.5 Abandonment. City may cease operation and maintenance of all or part of the Interceptor Sewer upon delivery of notice to District ten (10) years in advance of said abandonment. Upon notice by City to abandon the Interceptor Sewer, the parties shall meet and confer over the nature and conditions of such abandonment. In the event the parties cannot reach agreement, the matter shall be resolved pursuant to the dispute resolution procedure set forth

in this agreement. In the event of abandonment, City shall retain ownership of all Interceptor Sewer assets free from any claim of District.

- 10.6 Restoration Following Expiration or Termination. Should the agreement not be extended or District's contract capacity in the Interceptor Sewer be entirely terminated, District shall have up to three (3) years or such shorter period as is necessary to comply with Health & Safety Code section 5060, from the expiration of the lease right or termination to provide for removal of all connections and appurtenances to the Interceptor Sewer to the satisfaction of City and provide for alternative transportation of sewer flows. In no event shall the three (3) year period be applied in a manner that would result in a total lease term in excess of fifteen (15) years. If, for example, the lease terminates at the end of the fifteen (15) year term and a new lease is not issued, District would be required to immediately remove all connections and appurtenances.

#### ARTICLE 11 - INTERRUPTION OF SERVICE

- 11.1 Interruption of District Service. In the event of an interruption of Interceptor Sewer service to District as a result of disaster, operation of State or federal law, discontinuance or interruption of service to the City of the Metro System, or any other cause beyond the reasonable control of City, City shall bear no liability, and District shall defend, indemnify and hold City harmless from any claims and liabilities made for any injury to or damage to any person or property or for the death of any person or persons arising from or out of such interruption of service to District or for any other damages or costs incurred by City as a result of such interruption of District service. This section only applies to claims originating from District's customers or District's service area.

#### ARTICLE 12 - DISPUTE RESOLUTION

- 12.1 Application. This Article shall govern all disputes arising out of this agreement.
- 12.2 Mediation. Upon delivery of a written request for mediation to the other party involved, any dispute concerning this agreement may be submitted to a mutually acceptable mediator. The decision of the mediator shall not be final or binding unless otherwise agreed to in writing by the parties.
- 12.2.1 Condition Precedent to Litigation. Mediation shall be required before either party may proceed to litigation or any other method of dispute resolution. If a mediation session has not been held within ninety (90) days after written request for mediation has been received by either party, the party requesting mediation may proceed to litigation unless the period for mediation has been extended by mutual written agreement between the parties.
- a. Costs. The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator, and the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the parties, unless they agree otherwise.

- 12.2.3 Evidence. All mediation proceedings, results and documentation, shall be non-binding and inadmissible for any purpose in any legal proceeding (pursuant to California Evidence Code Sections 1115 through 1128), unless such admission is otherwise agreed upon in writing by both parties. Mediators shall not be subject to any subpoena or liability, and their actions shall not be subject to discovery.
- 12.3 Performance Required During Dispute. Nothing in this Article shall relieve either City or District from its obligation to perform all of their obligations under this agreement. City and District shall be required to comply with this agreement, including the performance of all disputed activity and disputed payments, pending the resolution of any dispute under this agreement.

#### ARTICLE 13 – INDEMNITY

- 13.1 District Indemnity. District shall defend and save and hold free and harmless the City, its directors, agents, officers and employees from any claim, liabilities, costs, penalties or fines for injury to or damage to any person or property, regulatory or other enforcement actions, or for death of any person arising from or out of any act or omission of District, its Board members, agents, officers, employees or contractors, arising from or out of any defects in the installation, construction, operation, maintenance, repair, replacement or reconstruction of any sewer connections or appurtenances to the Interceptor Sewer, including without limitation any sewer flow meters, or as a result of any sewer discharges into the Interceptor Sewer that violate this agreement but specifically excluding, without limitation, any claims resulting from a force majeure event addressed in Section 14.1.
- 13.2 City Indemnity. City shall defend and save and hold free and harmless the District and County, their Board members, agents, officers and employees from any claim, liabilities, costs, penalties or fines (collectively “claims”) for injury to or damage to any person or property, regulatory or other enforcement actions, or for death of any person arising from or out of any act or omission of City, its council members, agents, officers, employees or contractors, arising from or out of any defects in the installation, construction, operation, maintenance, repair, replacement or reconstruction of the Interceptor Sewer or City Sewer System but specifically excluding, without limitation, any claims resulting from interruptions of service addressed by Article 11 or force majeure event addressed in Section 14.1.

#### ARTICLE 14 – GENERAL PROVISIONS

- 14.1 Force Majeure. In the event performance under this agreement is delayed due to causes which are outside the control of the parties and their agents, and could not be avoided by the exercise of due care, which includes but is not limited to war, terrorist attack, act of God, government regulations, labor disputes, strikes, fires, floods, adverse weather, or inability to obtain materials, labor or equipment, both parties will be entitled to an extension in time of performance equivalent to the length of delay.

**14.2 Governing Law.** This agreement is intended to be construed pursuant to the laws of the State of California. In addition, parties agree that this agreement has been entered into in San Diego County and concerns subject matter located in San Diego County.

**14.3 Notices.** All notices required to be given under this agreement must be in writing and either served personally or mailed by certified mail, return receipt requested to:

San Diego County Sanitation District  
c/o Director of Public Works  
5500 Overland Avenue, Suite 315  
San Diego, CA 92123

County of San Diego  
c/o Director of Public Works  
5500 Overland Avenue, Suite 315  
San Diego, CA 92123

City of Chula Vista  
c/o Director of Public Works  
276 Fourth Avenue  
Chula Vista, CA 91910

**14.4 Waiver of Breach.** No failure of any party to insist upon strict performance by the other of any covenant, agreement, term or condition of this agreement, or to exercise any right or remedy consequent upon a breach thereof, shall constitute a waiver of any such breach or of such covenant, agreement, term or condition. No waiver of any breach shall affect or alter this agreement, but each and every covenant, condition, agreement and term of the agreement shall continue in full force and effect without respect to any other then existing or subsequent breach.

**14.5 Exhibits.** This agreement references and incorporates herein Exhibits A and B as listed below. These exhibits are "colored."

Exhibit A	Agency Tributaries & Trunk Lines
Exhibit B	Potential Future Impacts to Salt Creek Interceptor Sewer

**14.6 Amendment of Agreement.** Changes to unit transportation rates, proportionate percentages of flow and associated capital improvement charges, and modifications to Exhibits are ministerial. Amendments effecting the use and operation of the City Sewerage System and Interceptor Sewer, whether ministerial or discretionary, may only be made by a mutual agreement in writing between City and District stating the parties' intent to amend or supplement the agreement.

**14.7 Drafting of Agreement.** It is acknowledged that City, County and District, with the assistance of competent counsel, have participated in the negotiation of this agreement and that any ambiguity should not be construed for or against any party.

- 14.7.1 Understanding of Intent and Effect of Agreement. The parties expressly declare and represent that they have read the agreement and that they have consulted with their respective counsel regarding the meaning of the terms and conditions contained herein. The parties further expressly declare and represent that they fully understand the content and effect of this agreement and they approve and accept the terms and conditions contained herein, and that this agreement is executed freely and voluntarily.
- 14.8 Integration Clause. Parties represent, warrant and agree that no promise or agreement not expressed herein has been made to them, that this agreement contains the entire agreement between the parties, that this agreement supersedes any and all prior agreements or understandings between the parties, and that the terms of this agreement are contractual and not a mere recital; that in executing this agreement, neither party is relying on any statement or representation made by the other party, or the other party's representatives concerning the subject matter, basis or effect of this agreement other than as set forth herein; and that each party is relying solely on its own judgment and knowledge.
- 14.9 Third Party Beneficiaries. This agreement does not confer any rights on any person who is not a party to this agreement, and any third party beneficiaries are hereby expressly disclaimed.
- 14.10 Successors in Interest. This agreement shall be binding upon and shall inure to the benefit of the parties, and each of its respective successors, assigns, trustees or receivers.
- 14.11 Severability. Should any provision of this agreement be held invalid or illegal, such invalidity or illegality shall not invalidate the whole of this agreement, but, rather, the agreement shall be construed as if it did not contain the invalid or illegal provision, and the rights and obligations of the parties shall be construed and enforced accordingly, except to the extent that enforcement of this agreement without the invalidated provision would materially and adversely frustrate either or both parties' essential objectives set forth in this agreement.
- 14.12 Headings. All Section headings are for convenience only and shall not affect the interpretation of this agreement.
- 14.13 Signature Authority. Each party represents and warrants that its respective obligations herein are legal and binding obligations of such party, that each party is fully authorized to enter into this agreement, and that the person signing this agreement hereinafter for each party has been duly authorized to sign this agreement on behalf of said party.
- 14.14 Restrictions on Veto of Transfers and Acquisitions of Capacity. District understands and specifically recognizes that with respect to transfer and acquisition of capacity in the Interceptor Sewer or the creation of additional capacity in the Interceptor Sewer for any other authorized agency, District does not have the right to veto or prevent the transfer of capacity by and among other agencies, or to veto or prevent the creation or acquisition of capacity for another authorized agency or agencies. District recognizes that by signing this agreement District has expressly pre-approved such actions. The sole right of District

to object to any of the foregoing shall be through expression of its opinion to City and, where applicable, through exercise of its rights under the dispute resolution provisions of this agreement.

14.15 Other Agreements. Nothing in this agreement limits or restricts the right of the parties to make separate agreements with other agencies without the need to amend this agreement, provided that such agreements are consistent with this agreement. This agreement is not intended to nor shall it in any way supersede or modify the terms and conditions of the Regional Wastewater Disposal Agreement or any amendments thereto or any other transportation agreements between the parties and any amendments thereto.

14.16 Counterparts. This agreement may be executed in counterparts. The counterparts so executed shall constitute one agreement notwithstanding that the signatures of all parties do not appear on the same page.

14.17 Limited County Responsibilities. The parties recognize that the County is not a sewer service provider and that the County is a party to this agreement for the limited purpose of ensuring developers of the Villages are, as a condition of project approval, required to pay fees to City for the provision of sewer service and for no other reason. City and District shall not hold County responsible for any loss, claim or cause of action associated with the operation, maintenance or loss of use of the City Sewerage System or Interceptor Sewer.

IN WITNESS WHEREOF, this agreement is executed by the City, County and District.

SAN DIEGO COUNTY SANITATION  
DISTRICT

By: 

**David Hall**

Name: Clerk of the Board

Date: 7/21/16

Approved as to Form and Legality  
Office of County Counsel, County of San  
Diego

By: Thomas L. Bismuth

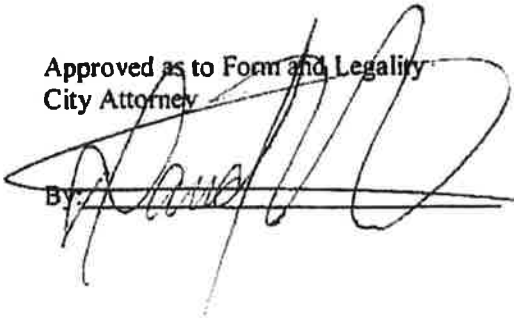
CITY OF CHULA VISTA

By: 

Name: Mary Casillas Salas,

Date: June 20, 2016

Approved as to Form and Legality  
City Attorney

By: 

Approved and/or authorized by the Board of Supervisors of the County of San Diego.	
Meeting Date: <u>6/29/16</u>	Minute Order No. <u>5401</u>
By: <u>D. Lopez</u>	Date: <u>7/01/16</u>
Deputy Clerk of the Board Supervisors	



COUNTY OF SAN DIEGO

By: DSH

**David Hall**

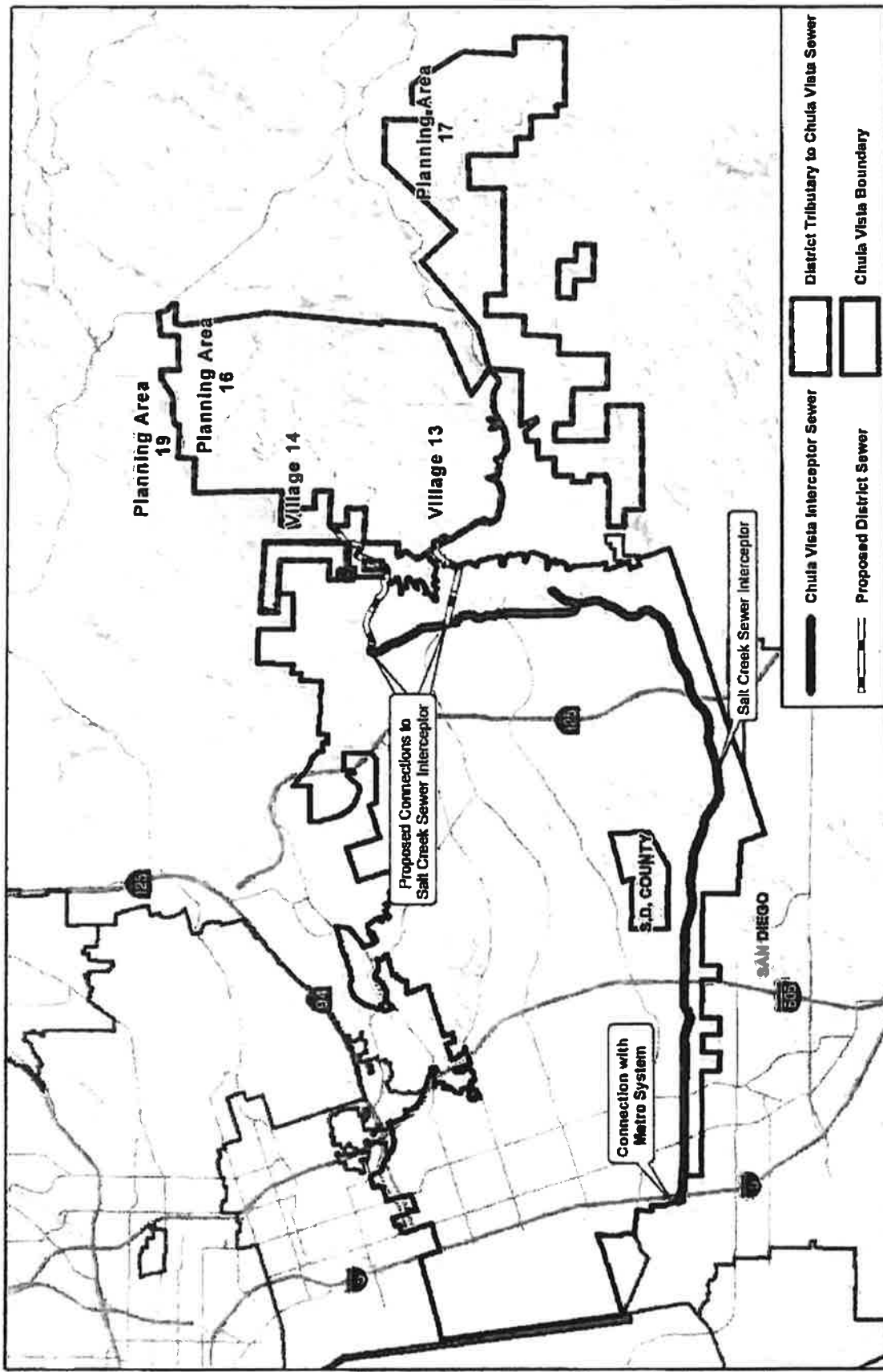
Name: Clerk of the Board

Date: 7/01/16

Approved as to Form and Legality  
Office of County Counsel, County of San Diego

By: Thomas C. Bosworth

Approved and/or authorized by the Board of Supervisors of the County of San Diego.	
Meeting Date: <u>6/29/16</u>	Minute Order No. <u>3A01</u>
By: <u>Diana Lopez</u>	Date: <u>7/01/16</u>
Deputy Clerk of the Board Supervisors	

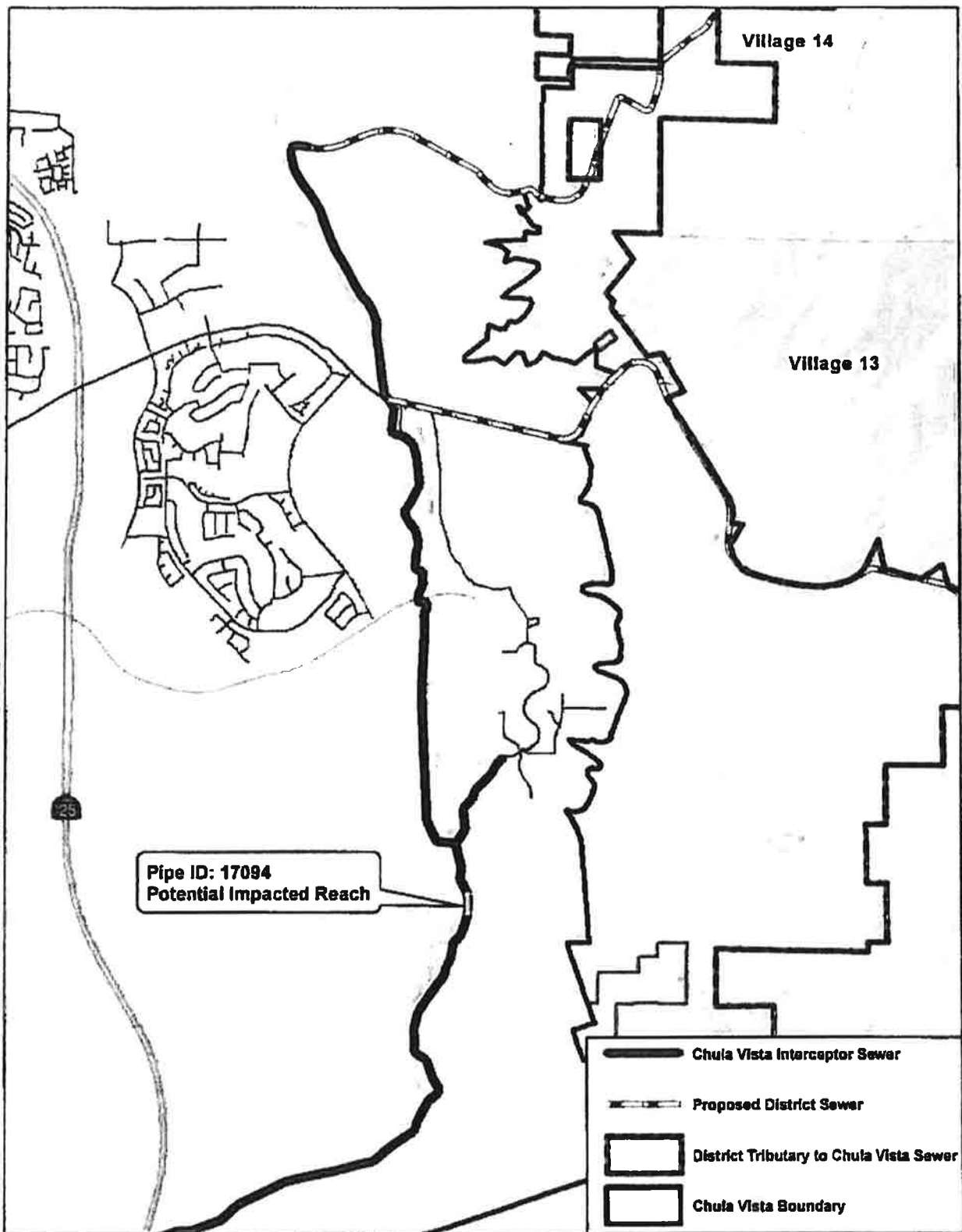


**Sewage Transportation Agreement for Salt Creek Interceptor Sewer Interagency Connections**

**San Diego County Sanitation District & City of Chula Vista**

**EXHIBIT A**

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### Salt Creek Interceptor Sewer Potential Capacity Restrictions

EXHIBIT B